TTTE3505 PENGUJIAN PERISIAN

PROJECT DOCUMENTATION

GROUP NAME: SOFTWARESLAYY

SEMESTER 1 2024/2025

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SECTION I

TEST PLAN

1.1 PROJECT IDENTIFICATION

Document Name:	SportHub System Test Plan
Project Title:	SportHub System
Date Created	21 October 2024
Project Owner:	Software Slayy
Project Manager:	Muhammad Ammar Najwan
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1.2 INTRODUCTION

This document outlines the testing plan and strategy for the SportHub system. This testing plan is essential to verify and validate all the functionality that have been developed and ensure its reliability, meet specified requirements and are fully prepared to support the sports community effectively.

1.3 OBJECTIVE

This test plan supports the following objectives:

i. To prepare a detailed schedule and list of tasks required in executing the system test.
ii. To establish the best approach for preparing the testing phase to validate the core functionalities.
iii. To assign the task to all involved parties and ensure all phases are aligned with the schedule.
iv. To prepare the list of sources and requirements needed in the test plan.
v. To define the tools and environment to conduct effective system tests.

1.4 BACKGROUND

The SportHub system shall facilitate mainly these following operations:

i. Login and sign up that allows users to sign up and log in to access the systems..
ii. Join events, view game history and edit profiles for sport enthusiasts.
iii. Create event, edit event, view participant and edit profile for event organizer.
iv. Verify event, verify account and edit profile for community manager

Figure 1.0 shows the context diagram of SportHub system. In this system, the community manager's primary role in SportHub system is to oversee their users' activities, participation and the events being conducted. Sport enthusiasts and event organizers are the main users of SportHub system where event organizers promote their event and open the registration to sport enthusiasts to participate.

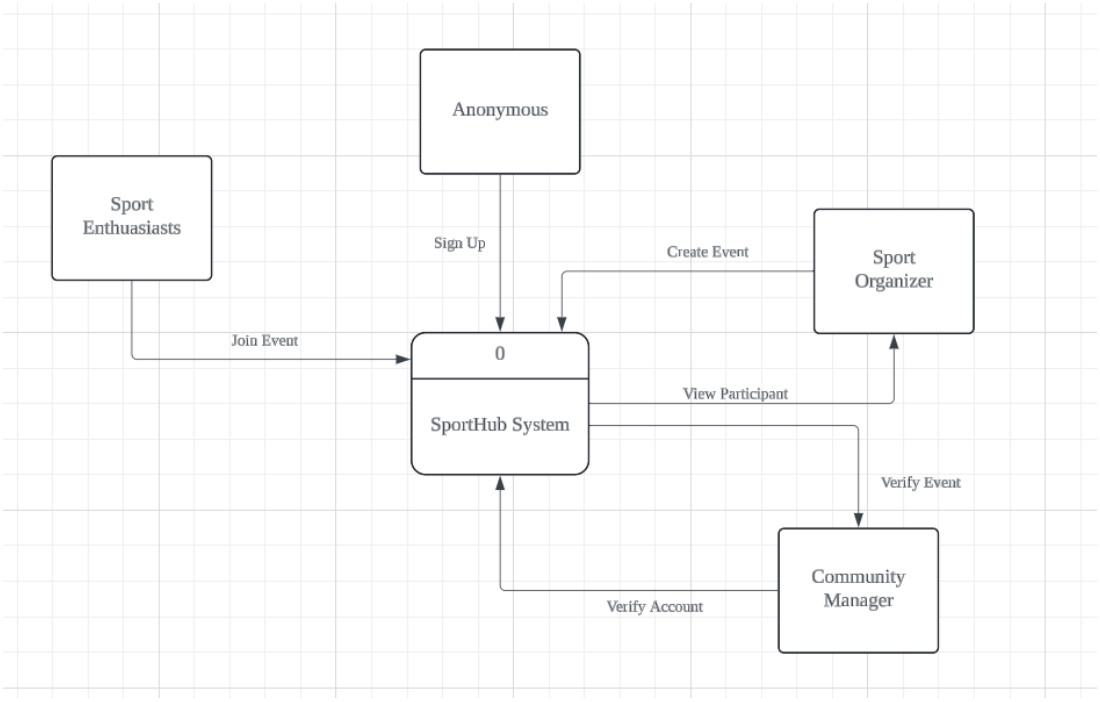


Figure 1.0 Context Diagram

The following table (Table 1.0) contains the list of features to be implemented in the SportHub system, separated by its accessible roles.

Function ID.	Feature	Function Description	Accessible Role
F001	Sign Up	To allow users to register for an account to use the system.	Anonymous
F002	Join Event	To allow users to join an event advertised on the system.	Sport Enthusiast
F003	View Game	To allow users to access and review the game history.	
F004	Verify User	To allow users to verify new registrations in the system.	Community Manager
F005	Verify Event	To allow users to check and validate an event's information.	
F006	Create Event	To allow users to hold an event after getting approval.	Sport Organizer
F007	View Participants	To allow users to view the participants registered in the event through the system.	
F008	Edit Event	To allow users to manage and update sports events efficiently.	
F009	Login	To allow users to log into the system using their login credentials.	Sport Enthusiast, Community Manager, Sport Organizer
F010	Update Password	To allow users to update their password.	
F011	Edit Profile	To allow users to update and modify their profile information.	

Table 1.0 Features in SportHub System

1.5 SCOPE OF TESTING

The scope of testing only covers black box-functional testing for features developed in the SportHub system, from F001 to F011. This test plan only covers system-level tests, excluding unit tests, static tests, integration tests, acceptance tests, regression tests, confirmation tests, and as well as other types of tests not mentioned in this Test Plan. It would focus on meeting the requirements of the system and making sure that the system is fit for purpose.

1.6 TEST ITEM & TEST BASIS

The following documents will provide the basis for defining correct operation:

i. SportHub System Requirement Specifications 1.0 (SRS)
ii. SportHub Software Design Specifications 1.0 (SDS)
iii. The test items include all system features in SportHub as described in section 1.4 below.

1.7 FEATURES TO BE TESTED

The following table contains the features to be tested based on SportHub System Software Requirement Specifications (SRS). Listed together are the function id and its corresponding functions and estimated risk level.

Function ID.	**Feature**	**Risk Level**
F001	Sign Up	High
F006	Create Event	High
F008	Edit Event	High
F009	Login	High
F011	Edit Profile	High

Table 1.1 Features to be tested in SportHub System

1.8 FEATURES NOT TO BE TESTED

Aside from the features listed in Section 1.7, other aspects of the system are not covered in this test plan. This includes:

i. Operation procedure

This test plan is for system-level tests, the operation procedure is not covered here. This also involved the day-to-day procedural operations of the systems, which are not covered in this test plan as it focused only on system functionality rather than workflow or administrative tasks.

ii. Network security

This test plan is designed for functional tests, security is not covered here. Since the plan is geared towards functional testing, security aspects such as encryption, network resilience, firewall configurations, and intrusion prevention are excluded. Network security testing would require a separate security-focused test plan to verify compliance with security standards, penetration testing, and data protection.

iii. UI/UX Aesthetic Element

Elements like layout, color schemes, font choices, and other purely aesthetic aspects are usually not covered in a functional test plan unless they impact usability. Testing can focus on core functionality without exhaustively verifying the visual elements.

iv. Database Performance & Optimization

Specific database optimization or query performance is generally not covered in a functional test plan. Functional tests focus on data retrieval and correct outputs, while database optimization would be covered under performance testing.

v. Role Specific Menu Navigation

Simple role-based menu navigation, where the feature only involves displaying the correct options for each role, typically does not need detailed testing if it doesn't alter the system's behavior or data.

1.9 TEST STRATEGY

The test on SportHub is a system level functional test that focuses only on the functional part of the system. Testing will be using a risk-based strategy, that is all high risk features will be tested.

1. Overview of the Test Strategy

The testing for SportHub will focus on the functional aspects of the system, employing a risk-based approach that prioritizes high-risk features. This approach is effective given the system's reliance on user interactions and event management, where failures can significantly impact user experience and system reliability.

2. Black-Box Testing Techniques

The test strategy employs various black-box testing techniques to ensure comprehensive coverage of the system's functionalities:

i. Equivalence Partitioning (EQ)

- Purpose: Divides input data into valid and invalid partitions to ensure that test cases are representative of all potential inputs.
- Application: For example, when testing the sign-up functionality, you would create partitions for valid email formats, invalid emails, valid passwords, and invalid passwords. Each class (like Community Manager , Sport Enthusiast, etc.) will be tested using input partitions defined by their attributes (e.g., userID, username).

ii. Boundary Value Analysis (BVA)

- Purpose: Focuses on the values at the boundaries of input partitions, as errors are often found at these extremes.
- Application when testing the join event functionality, you might test boundary conditions like the maximum number of participants allowed for an event or the minimum required details to create an event.

iii. Decision Table Testing (DTT)

- Purpose : Provides a systematic way to represent and test complex business logic by outlining inputs and corresponding outputs.
- Application : This technique can be applied to the verify event and

verify account functionalities. For example, if a user submits a verification request, the decision table would detail outcomes based on various input combinations, such as account status (verified, unverified) and event details (complete, incomplete).

iv. State Transition Testing (STT)

- Purpose: Validates the state changes in the system based on different inputs and conditions.
- Application: Relevant for the Community Manager class, especially in scenarios where the account verification process changes the state of the user (from unverified to verified) or an event (from pending to confirmed). This ensures all state transitions are covered.

v. Use Case Testing (UCT)

- Purpose: Tests all identified use cases to ensure that each functionality behaves as expected.
- Application: Each use case specified (e.g., edit profile, view game history) will be transformed into test cases, ensuring that the system operates correctly from a user's perspective. For instance, the join event use case will be tested by simulating different user scenarios (both valid and invalid).

3. Valid and Invalid Input Conditions

The testing strategy will also outline valid and invalid inputs based on the Software Requirements Specification (SRS):

- Valid Inputs: Inputs that meet the defined criteria for each functionality, like valid usernames, correct password formats, and appropriate event details.
- Invalid Inputs: Inputs that fail to meet the criteria, such as incorrect passwords, invalid email addresses, or insufficient details for event creation.

4. TCON# Assignment

For better tracking and identification, each input condition will be assigned a unique condition ID (TCON#) that allows easy reference during testing.

5. **Reporting and Defect Management**

   Any defects discovered during testing will be documented and reported for resolution, ensuring continuous improvement and adherence to quality standards.

   This structured approach will help ensure that SportHub is rigorously tested across all critical functionalities, allowing you to identify and rectify issues proactively, leading to a more reliable and user-friendly system.

1.10 ITEM PASS/ FAIL CRITERIA

The system must satisfy the following criteria to pass:

i. All test
ii. No deadlock during the operation.
iii. No critical bugs affecting core functionality.

Other than that, all test items must fulfill their requirements as stated in SRS.

1.11 SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

Suspension Criteria:

i. System experiences a critical error that blocks a major function, testing will be suspended.
ii. Testing environment is unstable due to frequent downtime or network issues, testing will be suspended until it is stable.
iii. Any vulnerability compromises user data, testing will halt until the issue is resolved.

Resumption Requirement:

i. All critical system failures have been fixed, and core functionality operates as intended without blocking issues
ii. The testing environment is confirmed to be stable and ready.
iii. Any security issues discovered must be resolved, and user data is protected according to security standards

1.12 ENTRY CRITERIA

The following items are needed before the testing can begin:

i. Requirements documents for SportHub System 1.1
ii. Software Under Test: SportHub 1.1

1.13 EXIT CRITERIA

The following items are needed before the testing can end:

i. All Test Deliverables in Section 1.10 Test Deliverables have been delivered to the client.
ii. Test execution has been completed.
iii. Open defect at the end of final iteration shall be:
    - Zero fatal defect,
    - Zero major defect
    - Less than or equal to three minor defects.
    - All test cases (100%) are executed.
    - All items in scope were tested.

1.14 TEST DELIVERABLES

The following documents will be generated by the system test group and will be delivered during the system testing.

i. Test Plan
ii. Test Design Specifications
iii. Test Case Specifications
iv. Test Procedure Specifications
v. Test Logs
vi. Test Completion Report

1.15 TEST ENVIRONMENT & INFRASTRUCTURE

This section describes the hardware, software, and operating system that are required for this system testing.

Hardware

The following table shows the hardware and hardware requirements for the SportsHub.

Hardware	Desktop/Laptop
Software	SportsHub
Operating System	Windows 10 or higher, macOS, Linux
Browser	Latest version browsers (Chrome, Firefox, Safari)

1.16 ROLES AND RESPONSIBILITIES

This section will identify the individuals or groups responsible for managing, designing, preparing, executing, witnessing, and checking the results of this testing.

No.	Name	Role	Responsibilities
1.	Syazwan	Test Manager	● Provide testing management oversight. ● responsible for recruiting software testing staff ● Updating project manager regularly about the progress of testing activities ● Schedule testing activities for testing and prepare test effort estimations. ● Trace test procedures with the help of test traceability matrix.
2.	Farhana	Test Lead	● Develop a comprehensive test plan and strategy for the project. ● Responsible for overseeing the actual execution of test cases ● Managing the testing team. ● Responsible for overseeing the defect management process ● Responsible for ensuring effective communication between the testing team, project stakeholders, and other teams involved in the software development lifecycle.

3.	Maisarah	Test Analyst	● Preparing test scenarios. ● Designing, planning, and executing test cases. ● Ensuring that the software meets business requirements ● Continuously updating test cases based on changing requirements
4.	Ammar & Umair	Tester	● Ensure quality by identifying and fixing bugs before the software is released. ● Responsible for conducting the testing, thereafter analyze the results and then submit his observations to the development team. ● Responsible for designing testing scenarios for usability testing.

Table 1.2 Roles and Responsibilities

1.17 STAFFING AND TRAINING

All personnel that are involved in this testing require training on SportHub according to their responsibility.

i. Training on the SportHub's features and user flow.
ii. Training on automated test tools such as Selenium and JMeter for efficiency in testing.

1.18 PLANNED ACTIVITIES AND TASKS

The following table shows the set of tasks necessary to prepare for and perform testing for SportsHub. It was to identify dependencies of other tasks and significant constraints such as test item availability, testing resources availability, and deadlines.

No.	Task	Activities	Target Date
1.	Test Planning and Control	● Define an overall test strategy, including the scope, required resources, and projected timelines for all testing activities. ● Submission of Test Plan for sign-off.	6/11/2024
2.	Test Analysis and design	● Review the requirements, define test scenarios, and develop detailed test cases along with design specifications.	13/11/2024

		● Submission of Test Design Specification, Test Case Specification, and Test Procedure Specification.	
3.	Test Environment	● Set up and configure the required hardware, software, and network configurations for testing.	20/11/2024
4.	Test Implementation and execution	● Execute test cases, log results, and report any defects found during the testing phase of SportsHub	27/11/2024
5.	Documenting test summary report	● Summarize testing activities, including metrics, outcomes, and any issues encountered during the process. ● Submission of Test Summary Report	18/12/2024
6.	Documenting test closure	● Prepare test closure documentation, including insights from lessons learned and final performance metrics. ● Submission of Test Closure	25/12/2024
7.	Test complete	● Conduct a final review to ensure all testing is finished and sign off on the testing phase. ● Delivery of product to client.	1/1/2025

Table 1.3 Planned Activities and Tasks

1.19 GLOSSARY

Term	**Definition**
Test Item	A part of a test object used in the test process.
Features to be tested	The process of making changes in a software system to add one or more new features or to make modifications in the already existing features.
Test Strategy	A description of how to perform testing to reach test objectives under given circumstances.
Item pass/fail	Identify whether a test item has passed the test process.
Test deliverables	A list of documents, tools and other equipment that must be created, provided and maintained to support testing activities in a project.
Entry criteria	The set of conditions for officially starting a defined task.
Exit criteria	The set of conditions for officially completing a defined task.
SRS	Software Requirements Specifications
SDS	Software Design Specifications

Table 1.4 Glossary

SECTION II

TEST DESIGN SPECIFICATION

2.1 PURPOSE

This test design specification supports the following objectives:

i. To identify the test items covered
ii. To further refine the test approach from Test Plan
iii. To define the sources of the information used to prepare the plan IV. To identify the general cases of the test to be executed

2.2 APPROACH REFINEMENT

Test Design:

Test design is a process that describes “how” testing should be done. It includes processes for the identifying test cases by enumerating steps of the defined test conditions. The testing techniques defined in test strategy or plan is used for enumerating the steps.

Test condition is a specific set of constraints which can contain functionalities like transactions, functions or structural elements for test cases in order to test the software application. Test conditions help to ensure that a software application is bug-free.

Test Condition:Test Coverage:

Test coverage is defined as a metric in Software Testing that measures the amount of testing performed by a set of tests. It will include gathering information about which parts of a program are executed when running the test suite to determine which branches of conditional statements have been taken

For each related technique, test condition and test coverage will be derived. Also, unique id will be associated with them. Where possible, examples of test data will be provided.

ID format for test condition, TCON<function id><running number>
ID format for test coverage, TCOV<function id><running number>

One test condition can cover many test coverage.

2.3 FEATURES TO BE TESTED

Nature of features as below :

- F001 - Anonymous Sign Up - To allow users to sign up to Sporthub Systems.
- F006 - Create Event - To allow users to hold an event after getting approval.
- F008 - Edit Event - To allow users to manage and update sports events efficiently.
- F009 - Login - To allow users to log into the system using their login credentials.
- F011 - Edit Profile - To allow users to update and modify their profile information.

2.3.1. F001 - User Sign Up

Four (out of five) techniques are used for designing test for this feature:

- Equivalence partitioning is used to split user sign up into possible partitions for test
- Boundary value analysis will test the boundary values of the email, password,phone number and SSM Number.
- State transition testing will test for major states of users who sign up in Sporthub System.
- Use case testing will test for sign up of Sporthub System.

Equivalence Partitioning and Boundary Value Analysis

The figure below shows the flow of Equivalence Partitioning towards Boundary Value Analysis in SportHub System respectfully.

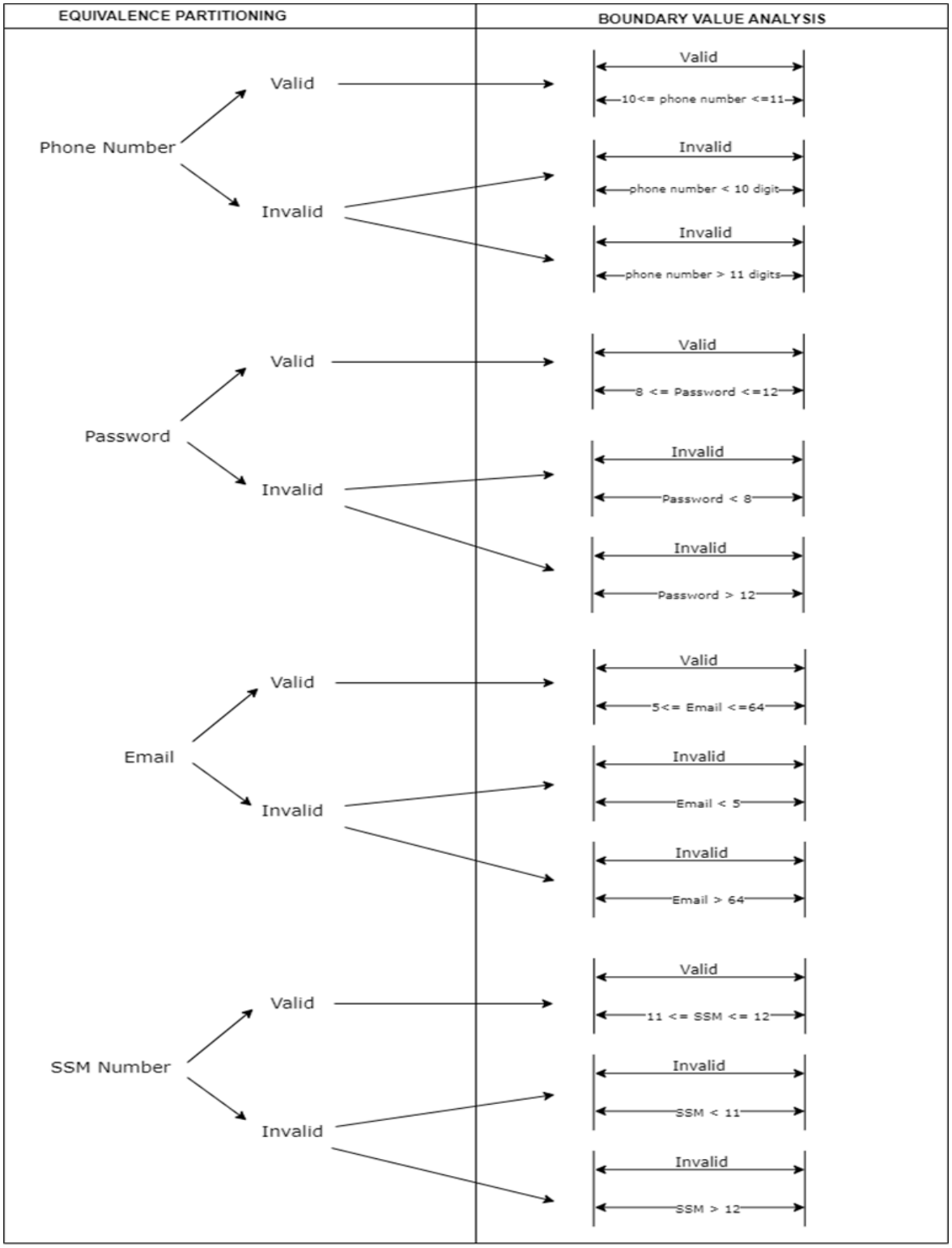


Figure 2.1 Phone number, password, phone number and SSM Number Equivalence Partition and Boundary Value Analysis

i. Equivalence Partitioning

The figure and tables below show the equivalence partition of phone number, password, email and SSM Number list of its test condition coverage in SportHub System respectfully.

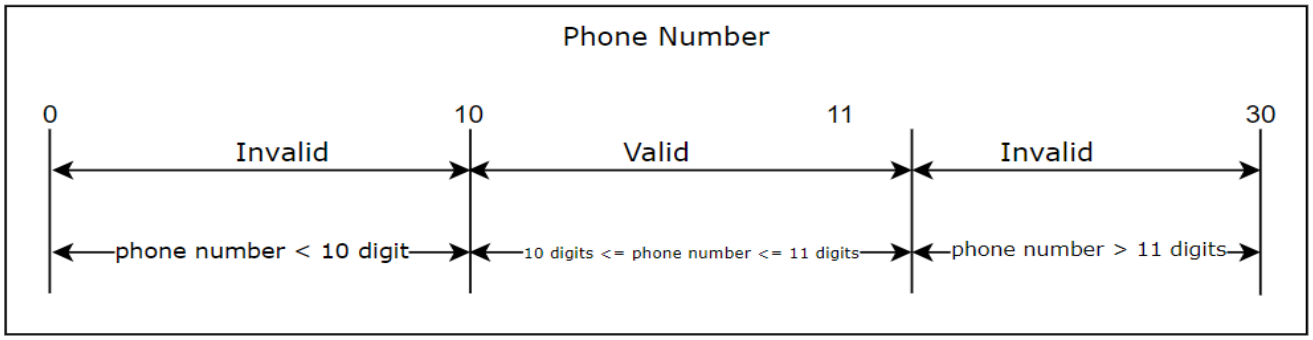


Figure 2.2 Phone Number Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-001	10<= phone number <=11	TCOV-01-001	10<=phone number<=11 (Valid Input)	011-70240408
TCON-01-002	Phone number < 10	TCOV-01-002	0<=phone number<=9 (Invalid Input)	011-702404
TCON-01-003	Phone number > 11	TCOV-01-003	Phone number > 11 (Invalid Input)	011-7024040809

Table 2.1 Phone number Equivalence Partitioning Test Condition and coverage

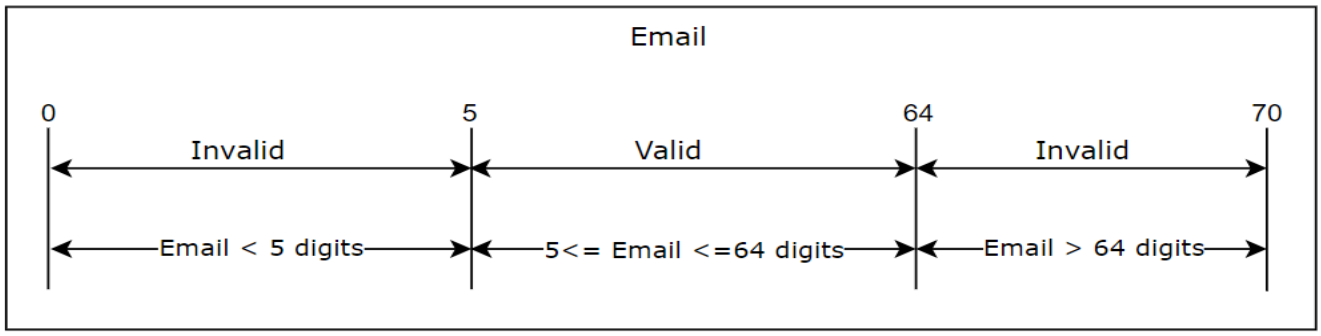


Figure 2.3 Email Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-004	5<= Email <=64	TCOV-01-004	5<= Email <=64 (Valid Input)	Amir46@gmail.com
TCON-01-005	Valid domain	TCOV-01-005	Valid domain (Valid Input)	samsul33@gmail.com
TCON-01-006	Valid local-part	TCOV-01-006	Valid local-part (Valid Input)	amirmasdi23@yahoo.com
TCON-01-007	Email < 5	TCOV-01-007	0<=Email<=4 (Invalid Input)	ab.c@gmail.com
TCON-01-008	Email > 64	TCOV-01-008	Email > 64 (Invalid Input)	a1234567890123456789012345678926541236987456321456321478569ybnkhger@gmail.com
TCON-01-009	No domain	TCOV-01-009	No domain (Invalid Input)	samsul@
TCON-01-010	Invalid domain	TCOV-01-010	Invalid domain (Invalid Input)	samsul2233@gmail.invalid
TCON-01-011	No local-part	TCOV-01-011	No local-part (Invalid Input)	@gmail.com
TCON-01-012	Invalid local-part	TCOV-01-012	Invalid local-part (Invalid Input)	@invalidlocal.com
TCON-01-013	No @ symbol	TCOV-01-013	No @ symbol (Invalid Input)	samsul32.com

Table 2.2 Email Equivalence Partitioning Test Condition and coverage

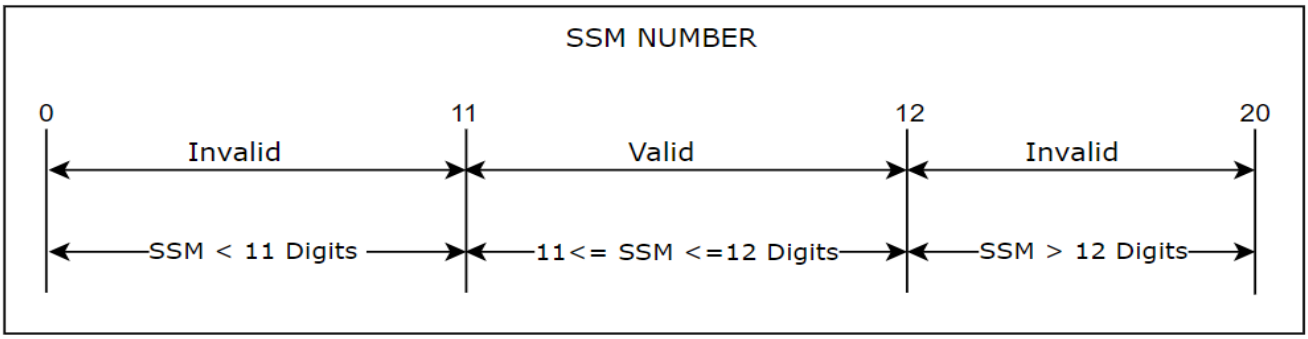


Figure 2.4 SSM Number Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-014	11<= SSM <= 12	TCOV-01-014	11<= SSM <= 12 (Valid Input)	15462359784
TCON-01-015	SSM < 11	TCOV-01-015	0<= SSM <=10 (Invalid Input)	152635
TCON-01-016	SSM > 12	TCOV-01-016	SSM > 12 (Invalid Input)	15236985475123

Table 2.3 SSM Number Equivalence Partitioning Test Condition and coverage

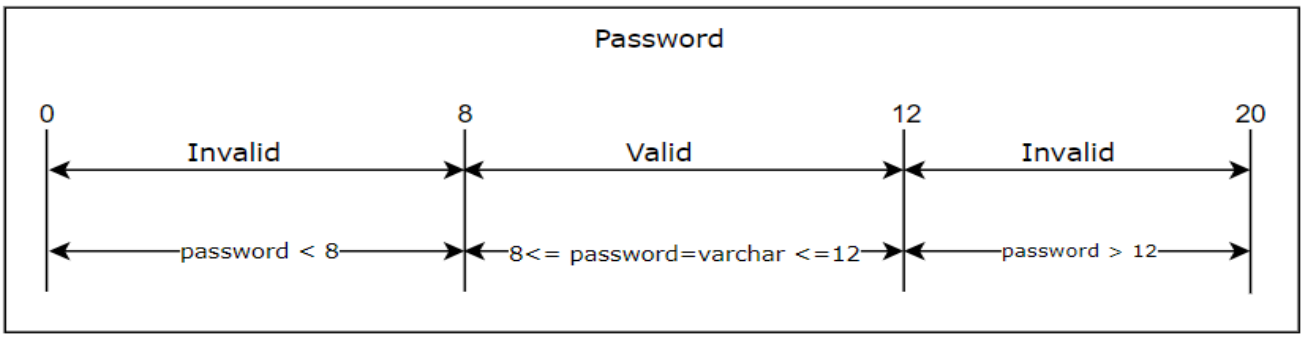


Figure 2.5 Password Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-017	8 <= Password <=12	TCOV-01-017	8 <= Password <=12	SS124MK99

			(Valid Input)	
TCON-01-018	Password < 8	TCOV-01-018	0 <= Password <=7 (Invalid Input)	S12
TCON-01-019	Password > 12	TCOV-01-019	Password > 12 (Invalid Input)	SS124MK102654A

Table 2.4 Password Equivalence Partitioning Test Condition and coverage

ii. Boundary Value Analysis

The figure and table show the boundary value analysis of phone number, email,SSM Number and password and list of condition coverage in Sporthub System.

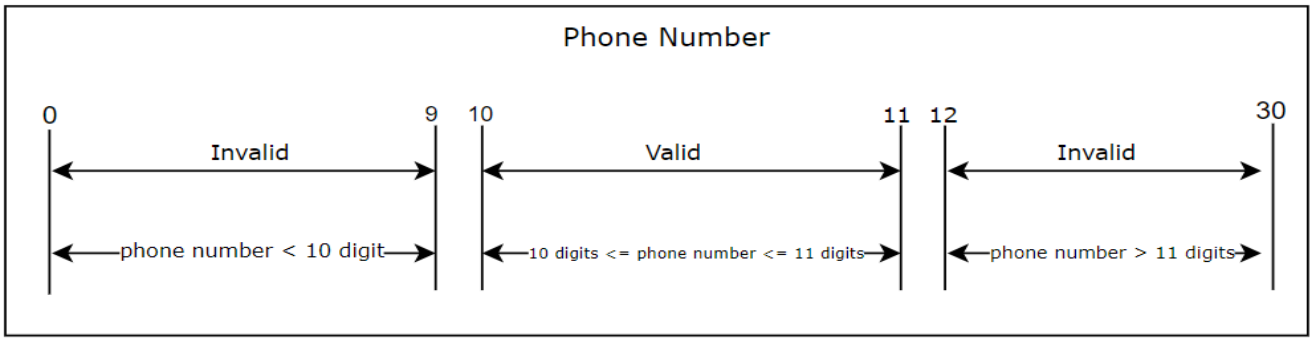


Figure 2.6 Phone number boundary value analysis

EP1: Phone number < 10
EP2: 10<= Phone Number <=11
EP3: Phone Number >11

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-020	Phone Number = 0	TCOV-01-020	Phone Number = 0 (Invalid)	-

TCON-01-021	Phone Number = 9	TCOV-01-021	Phone Number = 9 (Invalid)	011-702404
TCON-01-022	Phone Number = 10	TCOV-01-022	Phone Number = 10 (Valid)	011-7024040
TCON-01-023	Phone Number = 11	TCOV-01-023	Phone Number = 11 (Valid)	011-70240408
TCON-01-024	Phone Number = 12	TCOV-01-024	Phone Number = 12 (Invalid)	011-702404089
TCON-01-025	Phone Number = 13	TCOV-01-025	Phone Number = 13 (Invalid)	011-7024040895

Table 2.5 Phone Number Boundary Value Analysis

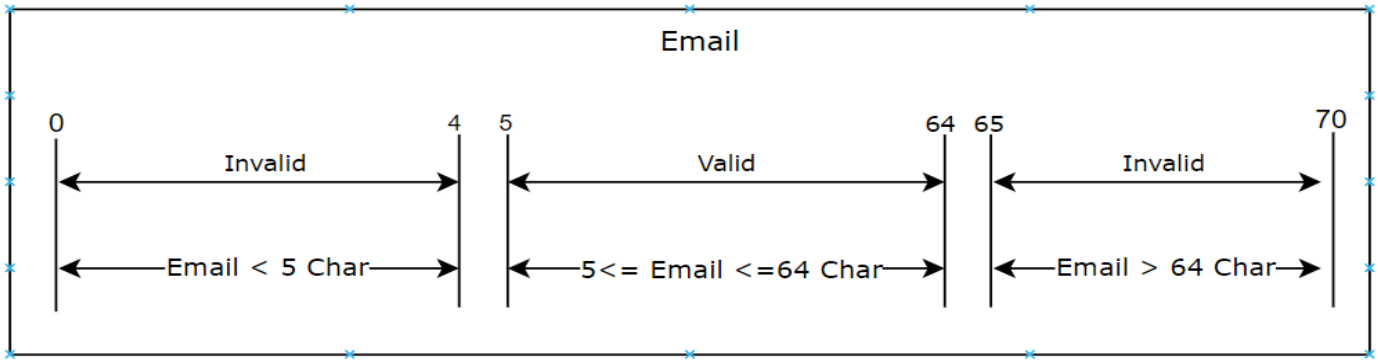


Figure 2.7 Email boundary value analysis

EP1: Email < 5
EP2: 5<= Email <=64
EP3: Email >64

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-026	email = 1	TCOV-01-026	email = 1 (Invalid)	g@yahoo.com
TCON-01-027	email= 0	TCOV-01-027	email= 0 (Invalid)	-
TCON-01-028	email = 4	TCOV-01-028	email = 4 (Invalid)	ab.c@yahoo.com

TCON-01-029	email = 15	TCOV-01-029	email = 15 (Valid)	Amir4656ytghtyhgt @gmail.com
TCON-01-030	email= 5	TCOV-01-030	email = 5 (Valid)	a@b.c@yahoo.com
TCON-01-031	email = 64	TCOV-01-031	email = 64 (Valid)	a12345678901234567890123456789012345678901234567890123456789012345@example.com
TCON-01-032	email = 66	TCOV-01-032	email = 66 (Invalid)	a12345678901234567890123456789012345678901234567890123456789012345679012345677yy8901234@example.com
TCON-01-033	email= 65	TCOV-01-033	email = 65 (Invalid)	a12345678901234567890123456789012345678901234567890123456789012345670123456677yy8901234@example.com
TCON-01-034	email = 67	TCOV-01-034	email = 67 (Invalid)	a12345678901234567890123456789012345678901234567890123456789012345678901234567yy8901234@example.com

Table 2.6 Email Boundary Value Analysis

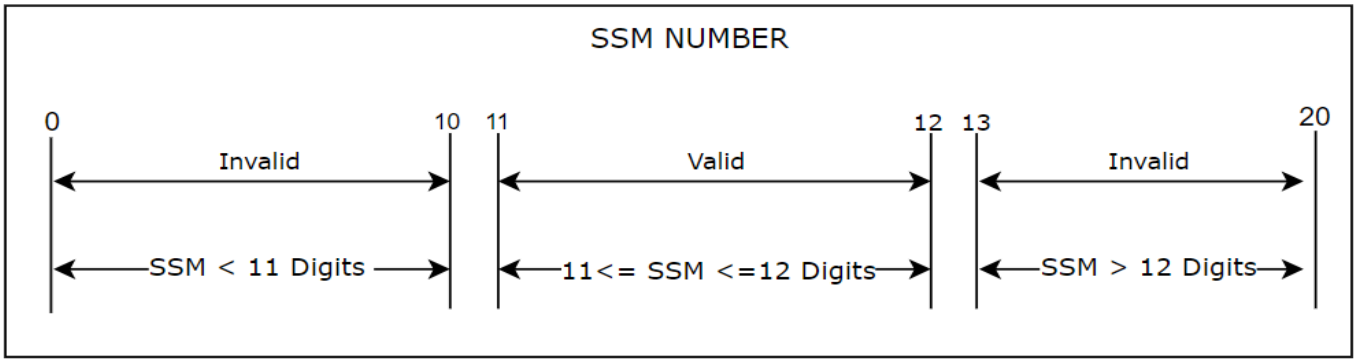


Figure 2.8 SSM Number boundary value analysis

EP1: SMM < 11
EP2: 11 <= SSM <=12
EP3: SSM > 12

Test Condition	Test Condition	Test Coverage	Test Coverage	Test Data

ID		ID		
TCON-01-035	SSM Number = 0	TCOV-01-035	SSM Number = 0 (Invalid)	-
TCON-01-036	SSM Number = 10	TCOV-01-036	SSM Number = 10 (Invalid)	124569745
TCON-01-037	SSM Number = 11	TCOV-01-037	SSM Number = 11 (Valid)	12548632549
TCON-01-038	SSM Number= 12	TCOV-01-038	SSM Number= 12 (Valid)	12365479532
TCON-01-039	SSM Number = 13	TCOV-01-039	SSM Number = 13 (Invalid)	125489324523
TCON-01-040	SSM Number = 14	TCOV-01-040	SSM Number = 14 (Invalid)	12456987451236

Table 2.7 SSM Number Boundary Value Analysis

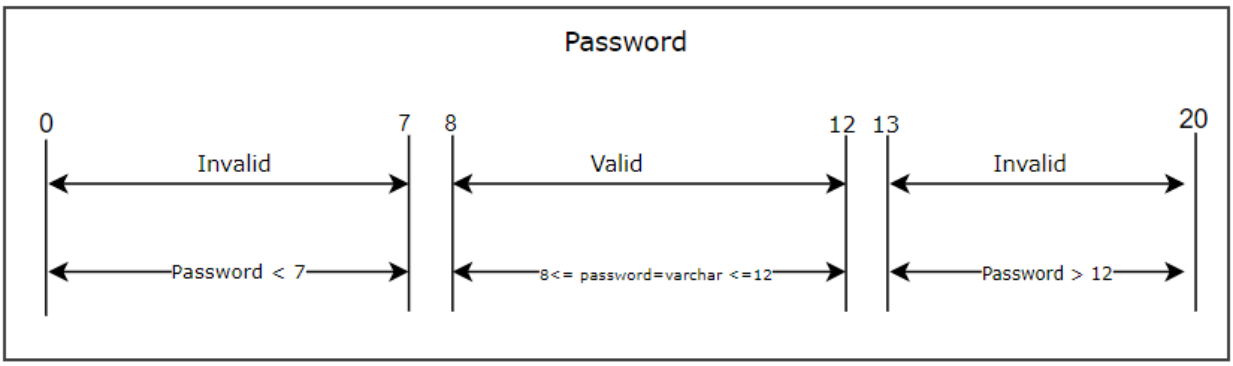


Figure 2.9 Password boundary value analysis

EP1: Password < 8

EP2: 8 <= password <= 12

EP3: password > 12

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-041	Password = 0	TCOV-01-041	Password = 0 (Invalid)	-
TCON-01-042	Password = 6	TCOV-01-042	Password = 6 (Invalid)	passwo
TCON-01-043	Password = 7	TCOV-01-043	Password = 7 (Invalid)	Pass1wo
TCON-01-044	Password = 8	TCOV-01-044	Password = 8 (Valid)	pass1wor
TCON-01-045	Password = 12	TCOV-01-045	Password = 12 (Valid)	pass1word1234
TCON-01-046	Password = 13	TCOV-01-046	Password = 13 (Invalid)	pass1word1234w
TCON-01-047	Password = 14	TCOV-01-047	Password = 14 (Invalid)	pass1word1234wc

Table 2.8 Password Boundary Value Analysis

iii. State Transition Testing

The figure and table show the state transition testing of registration.

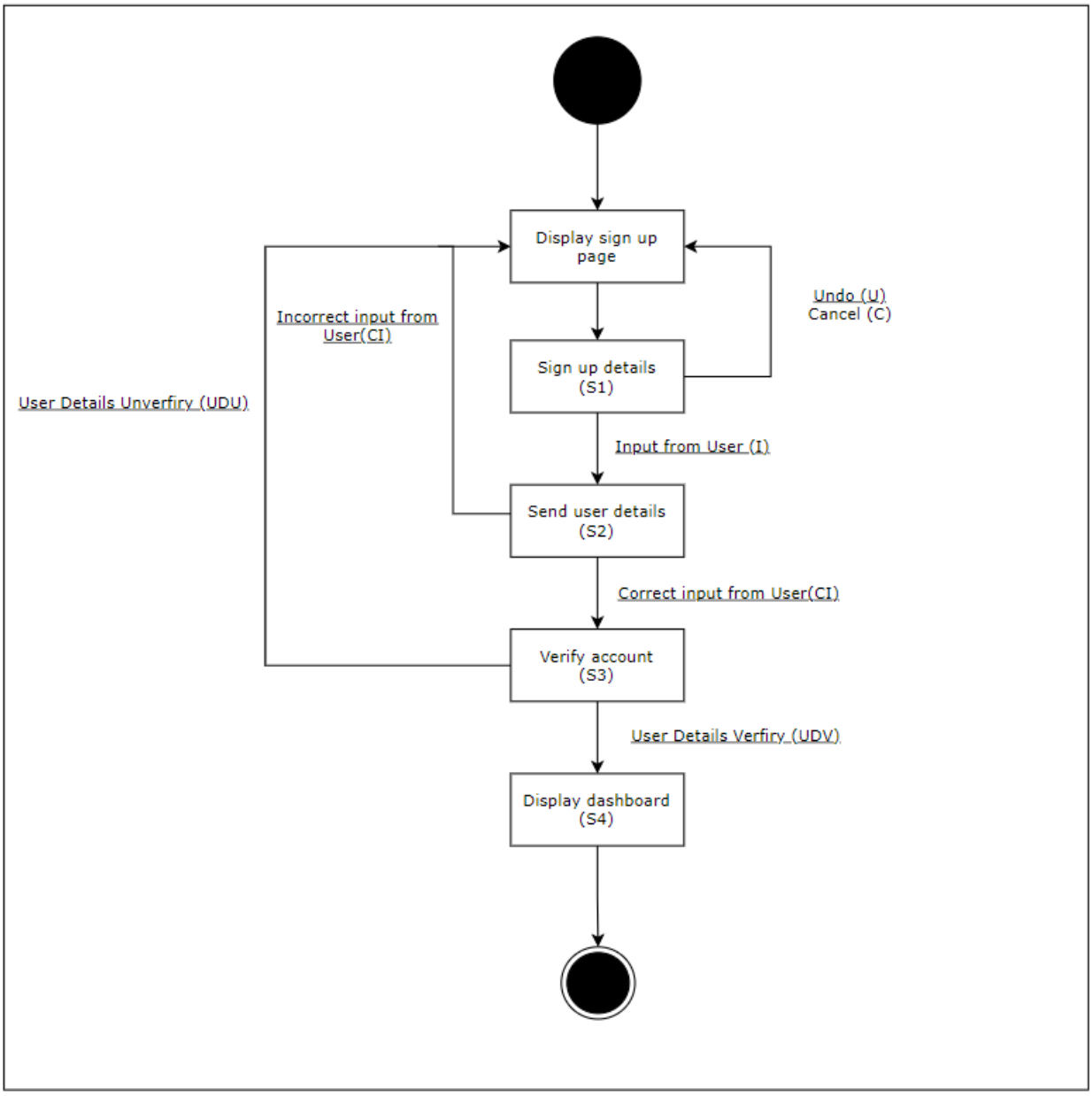


Figure 3.0 Sign Up State Transition Diagram

Test Coverage ID	Current State	Even	Action	Next State
TCOV-01-048	S1	Input from user	-	S2
TCOV-01-049	S1	Undo	Cancel	S1

TCOV-01-050	S2	Correct input from user	-	S3
TCOV-01-051	S2	Incorrect input from use	Error Message	S1
TCOV-01-052	S3	User detail verify	-	S4
TCOV-01-053	S3	User detail unverify	Error Message	S1

Table 2.9 Sign up state table with state coverage

iv. Use Case Testing

The table below shows the test case for Anonymous Sign Up in SportHub System.

Use Case	Anonymous Sign Up	
Goal in context	The anonymous may be successfully registered into the system if the entered registration credentials are valid.	
Brief description	The anonymous registers for an account to use the SportHub System	
Actor(s)	Anonymous (Sport Enthusiast or Sport Organizer)	
Pre condition	None	
Main Flow	Step	Action
	1.	System displays the "Sign Up" options for sport organizers and sport enthusiasts.
	2.	User selects an option to sign up: If the user selects "Sport Enthusiast," the system displays the form with fields: ● Phone Number ● Email ● Password If the user selects "Sport Organizer," the system displays the form with fields:

		• Company SSM • Company Email • Phone Number • Password
	3.	User enters valid inputs for all the required fields in the form.
	4.	User clicks the "Create Account" button to register.
	5.	System validates the inputs.
	6.	System processes the account creation.
	7.	System confirms registration.
Alternate Flow - Invalid Phone Number	2a.	User enters an invalid phone number in the phone number field
	2b.	User clicks "Create Account".
	2c.	System displays an error message: "Invalid phone number format. Please enter a valid phone number."
	2d.	Users are prompted to correct the phone number field and re-submit.
Post Condition	The account is not created. The user is directed back to the form to fix the invalid phone number.	
Alternate Flow - Invalid Email Format	2a.	User enters an invalid email in the email field
	2b.	User clicks "Create Account".
	2c.	System displays an error message: "Invalid email format. Please enter a valid email address."
	2d.	Users are prompted to correct the email field and re-submit.
Post Condition	The account is not created. The user is directed back to the form to fix the invalid email.	
Alternate Flow - Invalid password	2a.	User enters an invalid password in the email field
	2b.	User clicks "Create Account".

	2c.	System displays an error message: " The password field must be at least 8 characters ."
	2d.	Users are prompted to correct the password fields and re-submit.
Post Condition :	The account is not created. The user is directed back to the form to fix the invalid password.	
Alternate flow - Invalid SSM Number	2a.	Sport organizer enters an invalid Company SSM
	2b.	Sport Organizer clicks "Create Account".
	2c.	System displays an error message: "Invalid SSM format. Please enter a valid SSM."
	2d.	The Sport Organizer is prompted to correct the SSM field and re-submit.
Post Condition	The account is not created. The organizer is directed back to the form to correct the SSM.	
Post Condition	The account is not created. The organizer is directed back to the form to upload the logo.	
End	The Sport Enthusiast and Sport Organizer's registration is stored, pending validation by the Community Manager.	

Table 3.0 Sign Up use case

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-01-048	Main Flow	TCOV-01-054	Main Flow	**For Sport Enthusiast:** Full Name: Amir Masdo Phone Number : 011-70240408 Email : Amir46@gamil.com Password : Amir1234 Confirm Password : Amir1234

				For Sport Organizer: Company Name : Bagogo Sdn Bhd Company SSM :12365479532 Company Email :bagogo11@gmail.com Phone Number :017-70240408 Password :bagogo11 Confirm Password :bagogo11
TCON-01-049	Alternate Flow-Invalid phone number	TCOV-01-055	Alternate Flow-Invalid phone number	011-25369
TCON-01-050	Alternate Flow-Invalid Email Format	TCOV-01-056	Alternate Flow-Invalid Email Format	amir46.com
TCON-01-051	Alternate Flow - Invalid Password	TCOV-01-057	Alternate Flow - Invalid Password	Password : Amir1
TCON-01-052	Alternate flow - Invalid SSM Number	TCOV-01-058	Alternate flow - Invalid SSM Number	Company SSM :123654@#

Table 3.1 Sign Up Use Case Test and Conditions

2.3.2. F006 - Create Event

Three (out of five) techniques are used for designing test for this feature:

- State transition testing will test for major states and page transitions of functionality in F006.
- Use case testing will test the whole cases of functionality in F006.
- Decision table testing will test the combinations of various fields in creating an event.

i. State Transition Testing

Figure below shows the State Transition Diagram of F006 Create Event. It will show the various states and the transition during creating an event.

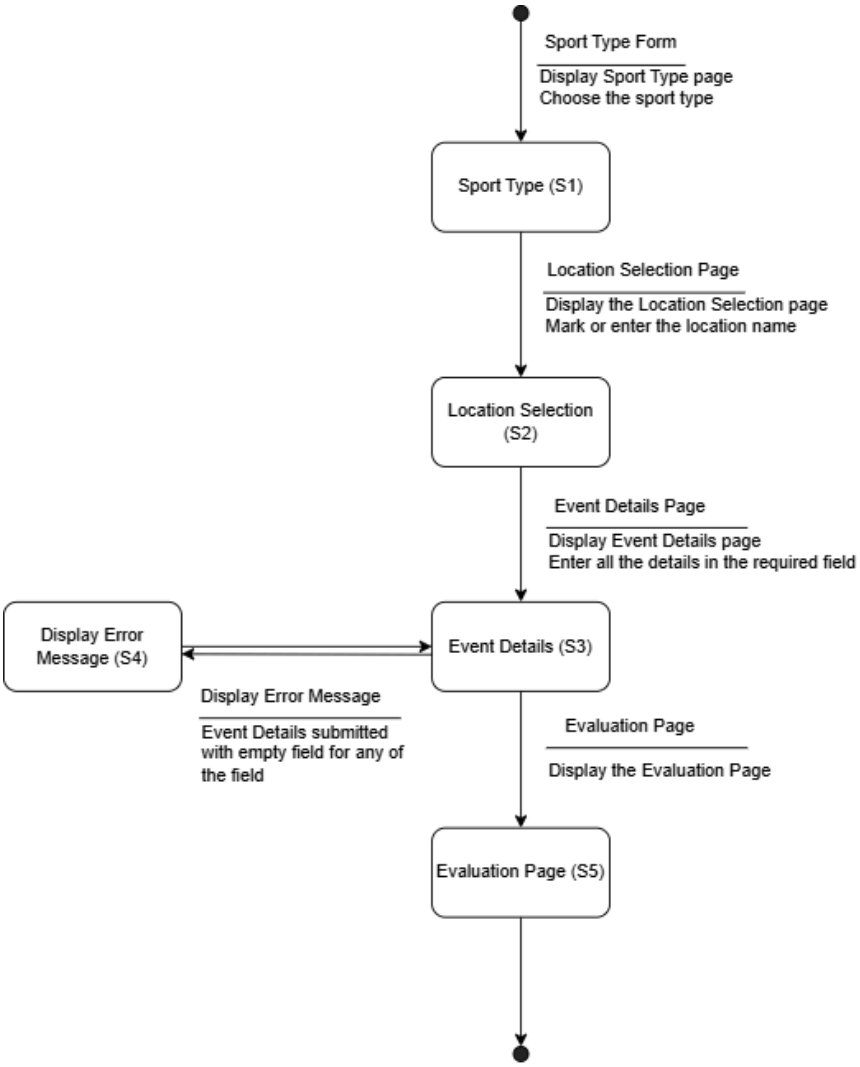


Figure 3.1 Create Event State Transition Diagram

Test Coverage ID	Current State	Event	Action	Next State
TCOV-06-001	S1	Sport Type Form	Choose the sport type	S2
TCOV-06-002	S2	Location Selection Page	Mark or enter the location name	S3
TCOV-06-003	S3	Event Details Page	Enter all the details in the required field	S5
TCOV-06-004	S4	Display Error Message	Event Details submitted with empty fields for any of the fields.	S3

Table 3.2 Create Event State Transition Table

Test Condition ID	Test Condition	Test Coverage
TCON-06-001	Sport Type Form	TCOV-02-001
TCON-06-002	Location Selection Page	TCOV-02-002
TCON-06-003	Event Details Page	TCOV-02-003
TCON-06-004	Display Error Message	TCOV-02-004

Table 3.3 Create Event State Transition Test Condition and Coverage

ii. Use Case Testing

The table below shows the Use Case of F006 Create Event in SportHub System.

Use Case ID	UC006
Use Case	F006 Create Event
Purpose	To allow Sport Organizers to create an event.
Actor	Sport Organizer
Secondary Actor	Community Manager
Precondition	i. Sport Organizer is registered and approved by the Community Manager.

	ii.	The Sports organizer is logged into the system.
Main Flow	1.	Sport Organizer click the ‘Add Event’ button in the ‘My Profile’ section.
	2.	System displays the Sport Type page.
	3.	Sport Organizer choose the suitable sport type category for their event.
	4.	System displays the Location page.
	5.	Sport Organizer mark or enter the location name of their event.
	6.	Sport Organizer clicks the ‘Save Location’ button to submit the location name.
	7.	System displays the Event Details form.
	8.	Sport Organizer enter the details of their event in the required form such as event host, event name, date of event and time.
	9.	Sport Organizer click the ‘Create’ button to submit the event details.
	10.	System displays a success message.
	11.	System will display the Evaluation Page and the Community Manager will evaluate the event registration.
Alternate Flow	6a.	The system will refresh the Location page if the Sport Organizer submits an empty location.
	9a.	The system will display an error message if there are missing fields in the Event Details form.
Exception Flow	-	
Post Condition	iii.	The event is created and ready for evaluation.

Table 3.4 Create Event Use Case

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-06-005	Main Flow	TCOV-06-005	Main Flow	Sport Type = “Running”

				Location = “Kajang” Event Host = “Hausboom” Event Name = “Boom+ KL Run” Date = 9 October 2026 Time = 8:15pm - 10:15pm Number of Participant = 200 Fee = 200 Description = “Best Running Event in Malaysia” Photo = hausboom.jpg
TCON-06-006	Alternative Flow - 6a	TCOV-06-006	Alternative Flow - 6a	Submit the empty location field. Location = “”
TCON-06-007	Alternative Flow - 9a	TCOV-06-007	Alternative Flow - 9a	Sport Type = “Running” Location = “Kajang” Event Host = “” Event Name = “Boom+ KL Run” Date = 9 October 2026 Time = 8:15pm - 10:15pm Number of Participant = 200 Fee = Description = “” Photo = hausboom.jpg

Table 3.5 Create Event Use Case Test Condition and Coverage

iii. Decision Table Testing

The table below shows the Decision Table Testing of F006 Create Event in SportHub System.

Test Condition ID	Test Condition
TCON-06-008	Valid Sport Type
TCON-06-009	Valid Location
TCON-06-010	Valid Event Host Name
TCON-06-011	Valid Event Name
TCON-06-012	Valid Date of Event
TCON-06-013	Valid Time of Event
TCON-06-014	Valid Number of Participant
TCON-06-015	Valid Fee
TCON-06-016	Valid Description
TCON-06-017	Valid Photo
TCON-06-018	Event Created

Table 3.6 Create Event Decision Table Testing Test Condition

Condition	TCOV-06-008	TCOV-06-009	TCOV-06-010	TCOV-06-011	TCOV-06-012	TCOV-06-013	TCOV-06-014	TCOV-06-015	TCOV-06-016	TCOV-06-017	TCOV-06-018
Valid Sport Type	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Valid Location	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Valid Event Host Name	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Valid Event Name	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Valid Date of Event	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y

Valid Time of Event	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Valid Number of Participant	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Valid Fee	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Valid Description	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Valid Photo	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Output											
Event Created	Y	N	N	N	N	N	N	N	N	N	N

Table 3.7 Create Event Decision Table Testing

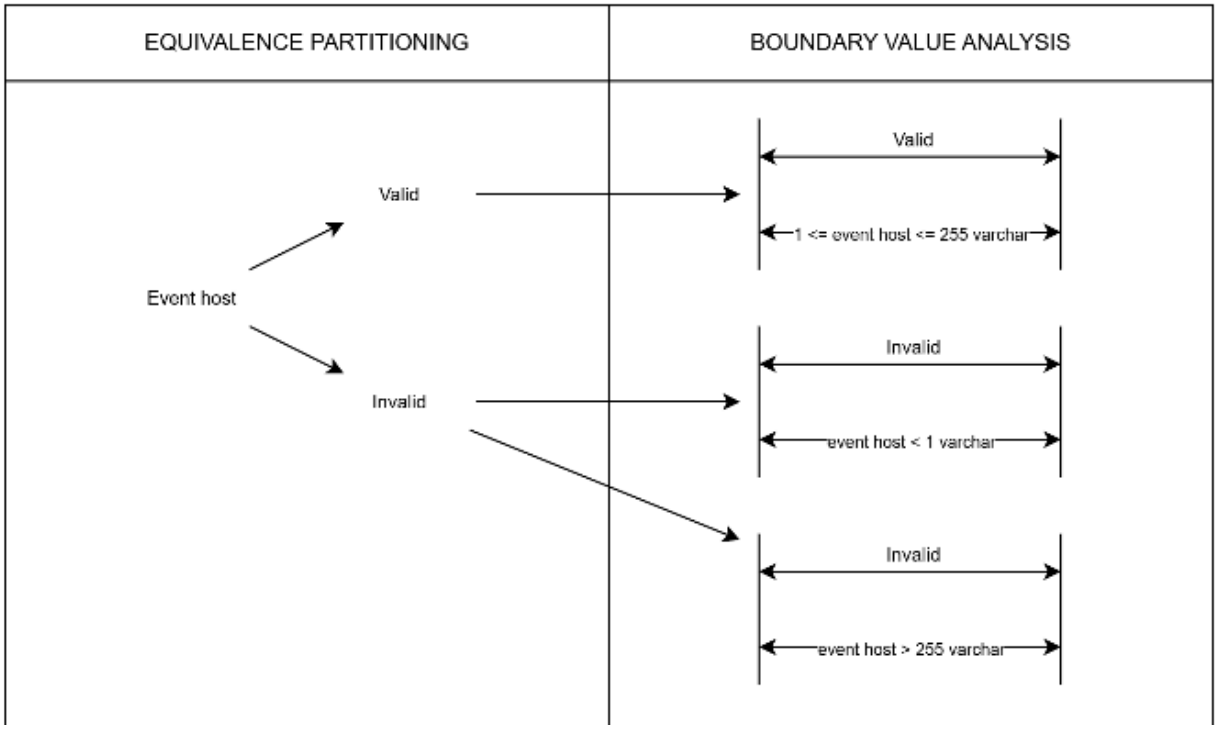
2.3.3. F008 - Edit Event

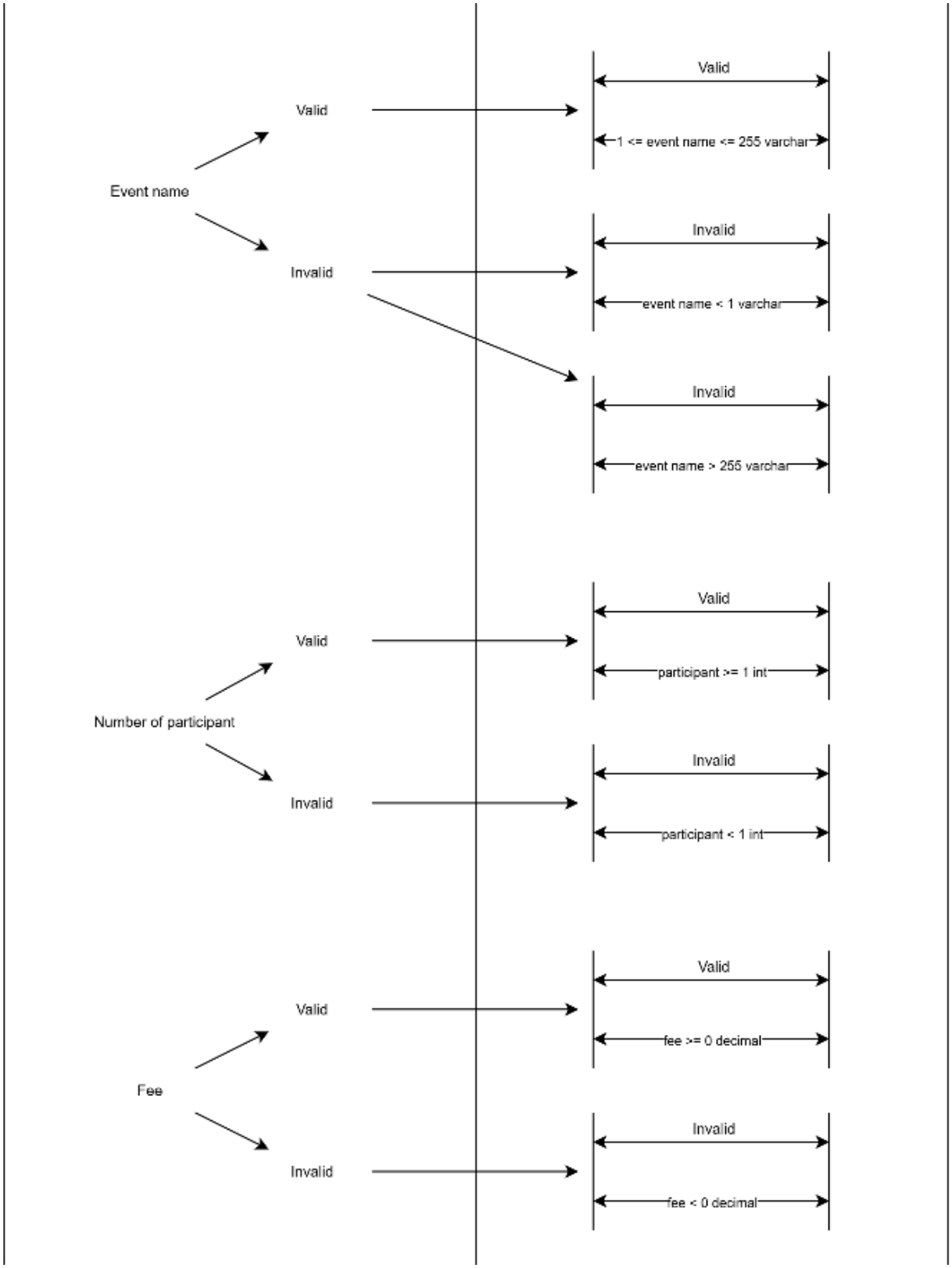
Four (out of five) techniques are used for designing test for this feature:

- Equivalence partitioning is used to split the edit event form based on the input.
- Boundary value analysis will test the boundary values of the edit events fields.
- State transition testing will test for major states of users who edit event in Sporthub System.
- Use case testing will test the edit event function of Sporthub System.

Equivalence Partitioning and Boundary Value Analysis

The figure below shows the flow of Equivalence Partitioning towards Boundary Value Analysis in SportHub System respectfully.




Event name
Valid
Invalid
Valid
1 <= event name <= 255 varchar
Invalid
event name < 1 varchar
Invalid
event name > 255 varchar
Number of participant
Valid
Invalid
Valid
participant >= 1 int
Invalid
participant < 1 int
Fee
Valid
Invalid
Valid
fee >= 0 decimal
Invalid
fee < 0 decimal

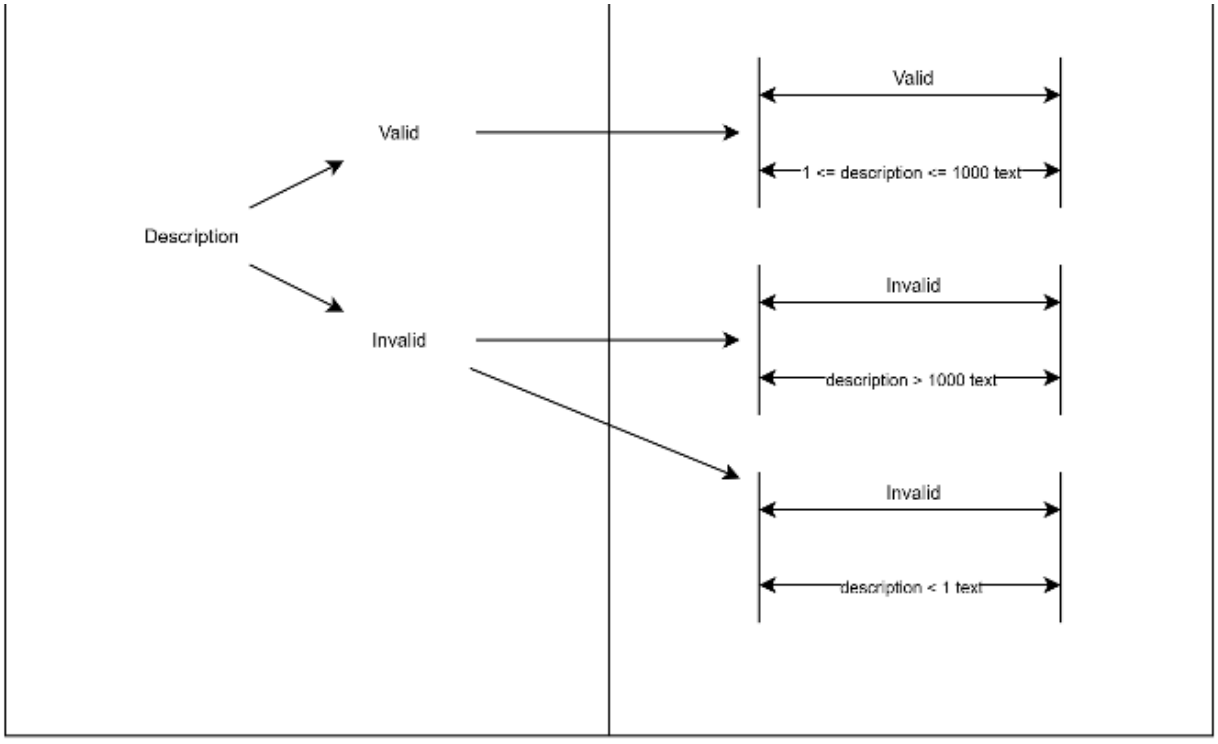


Figure 3.2 Event host, event name, number of participant, fee and description Equivalence Partition and Boundary Value Analysis

i. Equivalence Partitioning

The figure and tables below show the equivalence partition of event host, event name, number of participant, fee and description list of its test condition coverage in SportHub System respectfully.

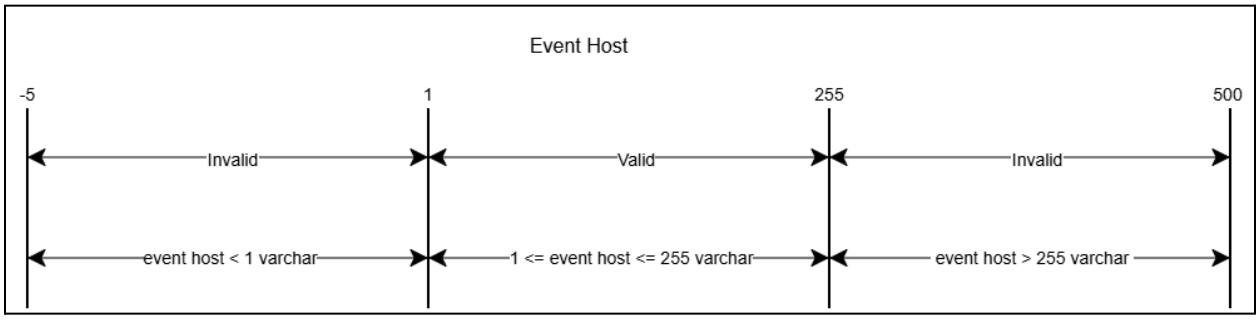


Figure 3.3 Event host Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-001	1 <= event host <= 255 varchar	TCOV-08-001	1 <= event host <= 255 varchar (Valid)	Hausboom
TCON-08-002	event host < 1 varchar	TCOV-08-002	event host < 1 varchar (Invalid)	No input
TCON-08-003	event host > 255 varchar	TCOV-08-003	event host > 255 varchar (Invalid)	Input (varchar) > 255 words

Table 3.8 Event host Equivalence Partitioning Test Condition and coverage

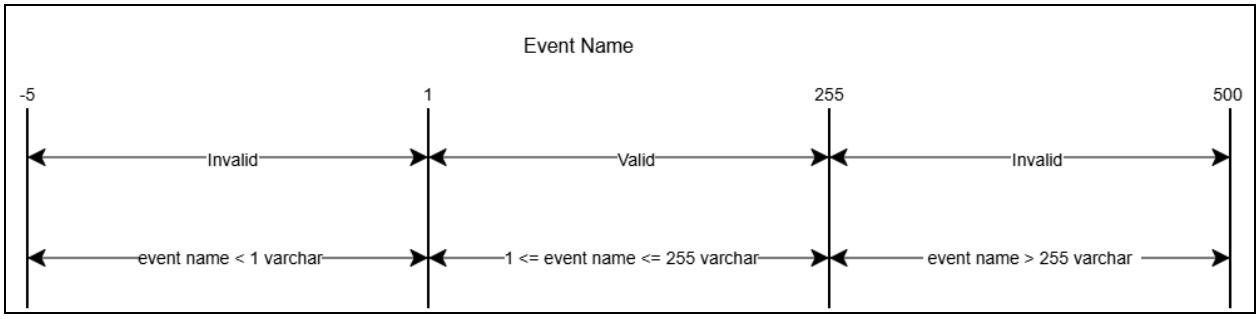


Figure 3.4 Event name Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-004	1 <= event name <= 255 varchar	TCOV-08-004	1 <= event name <= 255 varchar (Valid)	Hausboom Futsal
TCON-08-005	event name < 1 varchar	TCOV-08-005	event name < 1 varchar (Invalid)	No input
TCON-08-006	event name >	TCOV-08-006	event name >	Input (varchar) >

	255 varchar		255 varchar (Invalid)	255 words

Table 3.9 Event name Equivalence Partitioning Test Condition and coverage

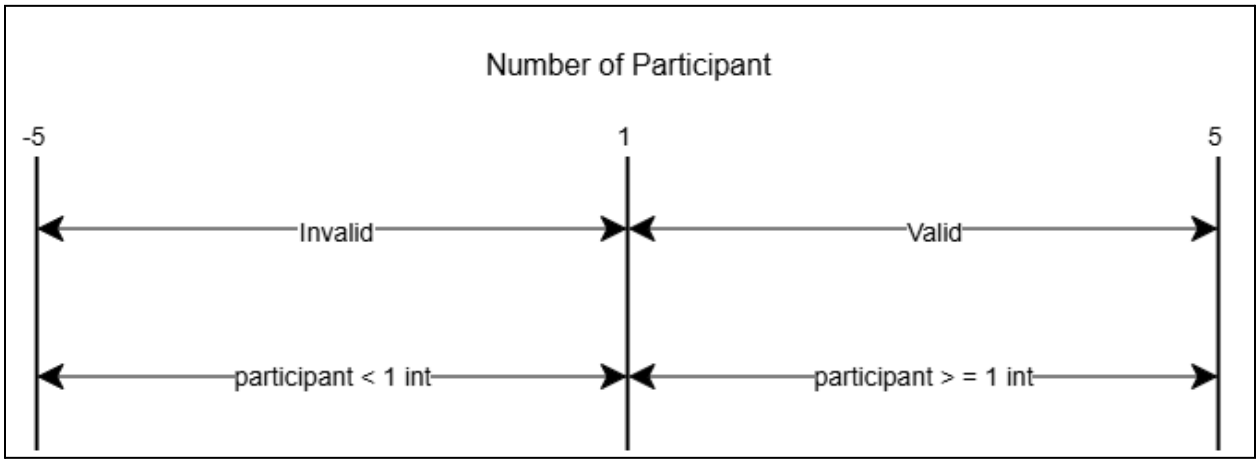


Figure 3.5 Number of participant Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-007	participant >= 1 int	TCOV-08-007	participant >= 1 int (Valid)	20
TCON-08-008	participant < 1 int	TCOV-08-008	participant < 1 int (Invalid)	0

Table 4.0 Number of participant Equivalence Partitioning Test Condition and coverage

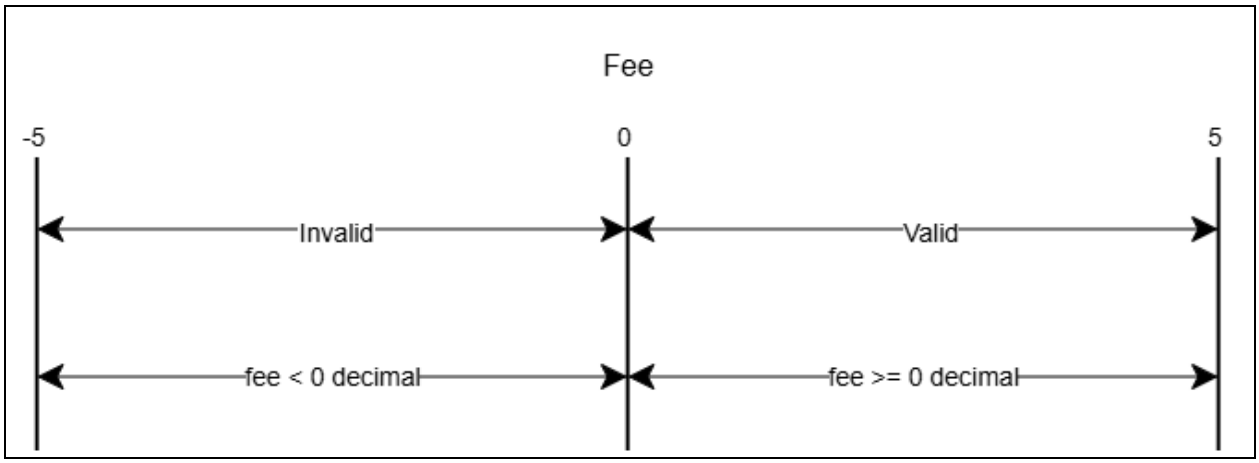


Figure 3.6 Fee Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-009	fee >= 0 decimal	TCOV-08-009	fee >= 0 decimal (Valid)	100
TCON-08-010	fee < 0 decimal	TCOV-08-010	fee < 0 decimal (Invalid)	-100

Table 4.1 Fee Equivalence Partitioning Test Condition and coverage

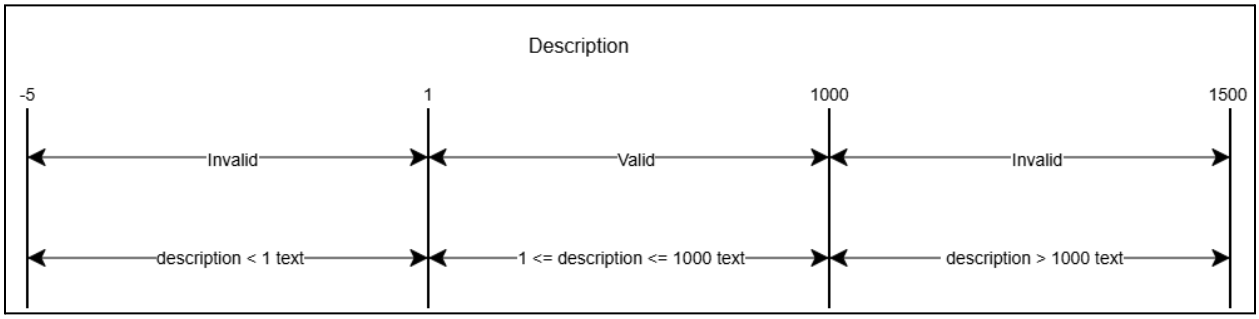


Figure 3.7 Description Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-011	1 <= description <= 1000 text	TCOV-08-011	1 <= description <= 1000 text (Valid)	Hausboom Fun Futsal
TCON-08-012	description > 1000 text	TCOV-08-012	description > 1000 text (Invalid)	Input (text) > 1000 words
TCON-08-013	description < 1 text	TCOV-08-013	description < 1 text (Invalid)	No input

Table 4.2 Description Equivalence Partitioning Test Condition and coverage

ii. Boundary Value Analysis

The figure and table show the boundary value analysis of event host, event name, number of participants, fee, description and list of condition coverage in Sporthub System.

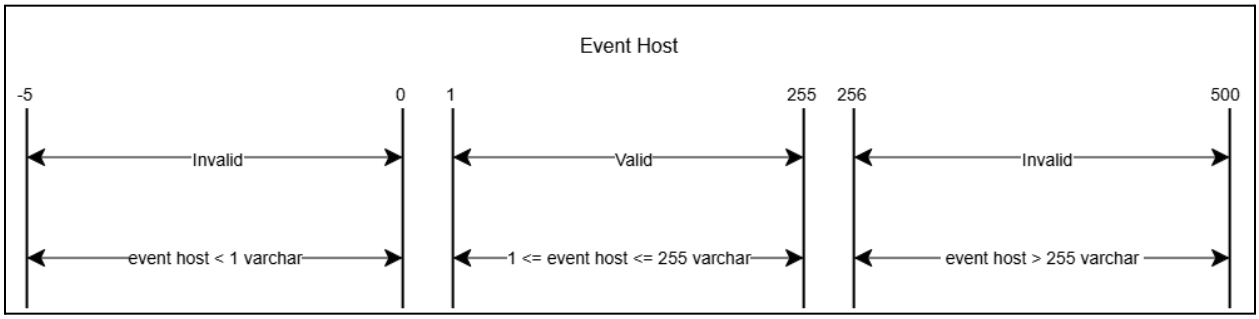


Figure 3.8 Event Host Boundary Value Analysis

EP1: Event Host < 1

EP2: 1 <= Event Host <= 255

EP3: Event Host > 255

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-014	event host = 0 varchar	TCOV-08-014	event host = 0 varchar (Invalid)	No input
TCON-08-015	event host = 256 varchar	TCOV-08-015	event host = 256 varchar (Invalid)	Input (varchar) equal to 256 words
TCON-08-016	event host = 1 varchar	TCOV-08-016	event host = 1 varchar (Valid)	N
TCON-08-017	event host = 2 varchar	TCOV-08-017	event host = 2 varchar (Valid)	Ni
TCON-08-018	event host = 254 varchar	TCOV-08-018	event host = 254 varchar (Valid)	Input (varchar) equal to 254 words
TCON-08-019	event host = 255 varchar	TCOV-08-019	event host = 255 varchar (Valid)	Input (varchar) equal to 255 words

Table 4.3 Event Host Boundary Value Analysis

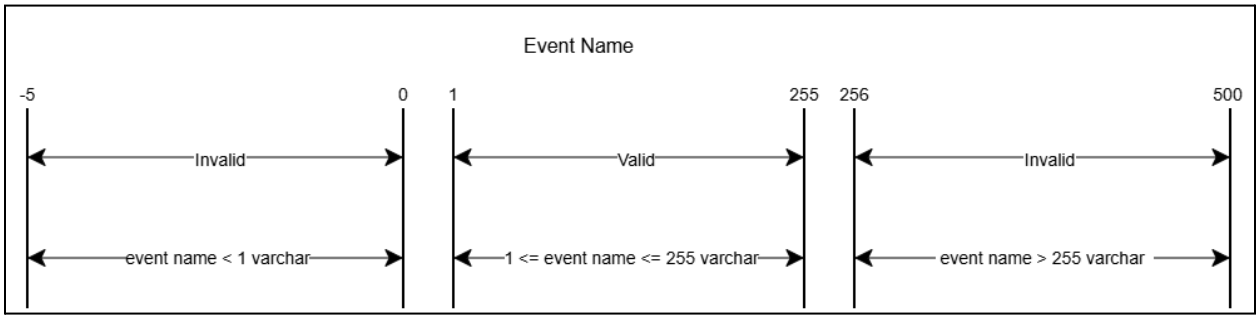


Figure 3.9 Event Name Boundary Value Analysis

EP1 : Event Name < 1

EP2: 1 <= Event Name <= 255

EP3 : Event Name >255

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-020	event name = 0 varchar	TCOV-08-020	event name = 0 varchar (Invalid)	No input
TCON-08-021	event name = 256 varchar	TCOV-08-021	event name = 256 varchar (Invalid)	Input (varchar) equal to 256 words
TCON-08-022	event name = 1 varchar	TCOV-08-022	event name = 1 varchar (Valid)	F
TCON-08-023	event name = 2 varchar	TCOV-08-023	event name = 2 varchar (Valid)	Fu
TCON-08-024	event name = 254 varchar	TCOV-08-024	event name = 254 varchar (Valid)	Input (varchar) equal to 254 words
TCON-08-025	event name = 255 varchar	TCOV-08-025	event name = 255 varchar (Valid)	Input (varchar) equal to 255 words

Table 4.4 Event Name Boundary Value Analysis

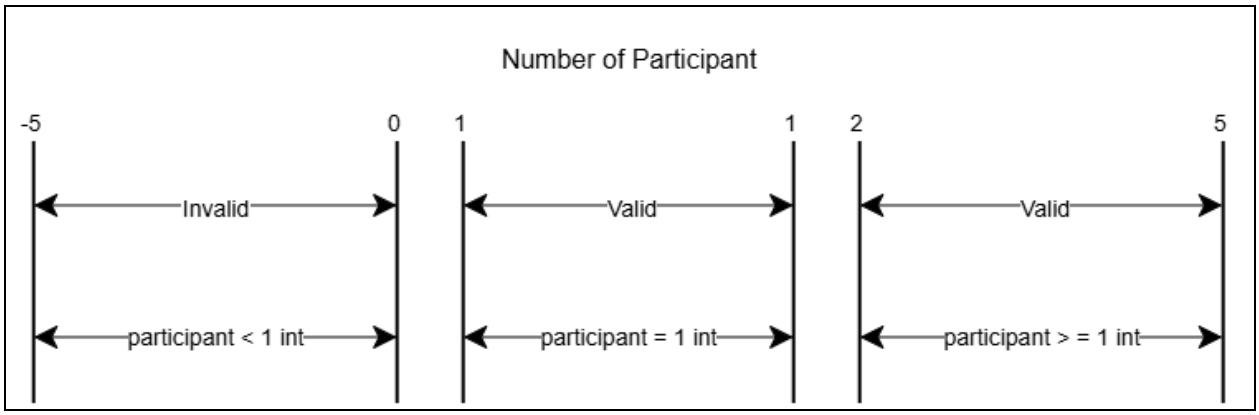


Figure 4.0 Number of Participant Boundary Value Analysis

EP1 : Participant < 1

EP2 : Participant >= 1

Test Condition ID	**Test Condition**	**Test Coverage ID**	**Test Coverage**	**Test Data**
TCON-08-026	participant = 0 int	TCOV-08-026	participant = 0 int (Invalid)	0
TCON-08-027	participant = 1 int	TCOV-08-027	participant = 1 int (Valid)	1
TCON-08-028	participant = 2 int	TCOV-08-028	participant = 2 int (Valid)	2

Table 4.5 Number of Participant Boundary Value Analysis

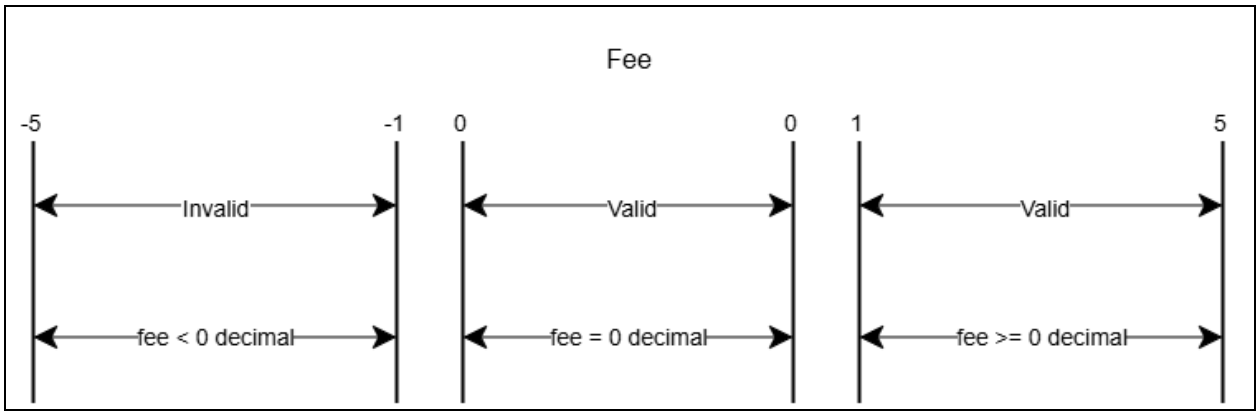


Figure 4.1 Fee Boundary Value Analysis

EP1: Fee < 0

EP2: Fee >= 0

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-029	fee = -1 decimal	TCOV-08-029	fee = -1 decimal (Invalid)	-1
TCON-08-030	fee = 0 decimal	TCOV-08-030	fee = 0 decimal (Valid)	0
TCON-08-031	fee = 1 decimal	TCOV-08-031	fee = 1 decimal (Valid)	1

Table 4.6 Fee Boundary Value Analysis

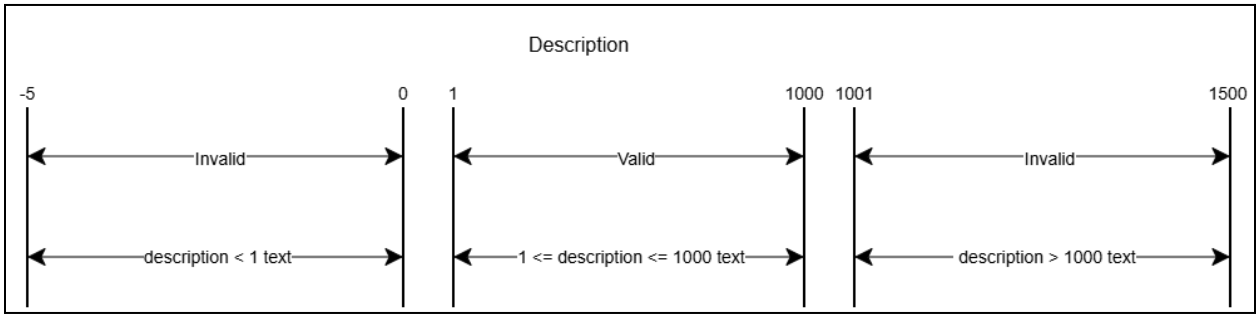


Figure 4.2 Description Boundary Value Analysis

EP1 : Description < 1

EP2 : 1<= Description <= 1000

EP3 : Description > 1000

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-08-032	description = 0 text	TCOV-08-032	description = 0 text (Invalid)	No input
TCON-08-033	description = 1001 text	TCOV-08-033	description = 1001 text (Invalid)	Input (text) equal to 1001 words
TCON-08-034	description = 1 text	TCOV-08-034	description = 1 text (Valid)	H
TCON-08-035	description = 2 text	TCOV-08-035	description = 2 text (Valid)	He
TCON-08-036	description = 999 text	TCOV-08-036	description = 999 text (Valid)	Input (text) equal to 999 words
TCON-08-037	description = 1000 text	TCOV-08-037	description = 1000 text (Valid)	Input (text) equal to 1000 words

Table 4.7 Description Boundary Value Analysis

iii. State Transition Testing

The figure and table show the state transition testing of edit event

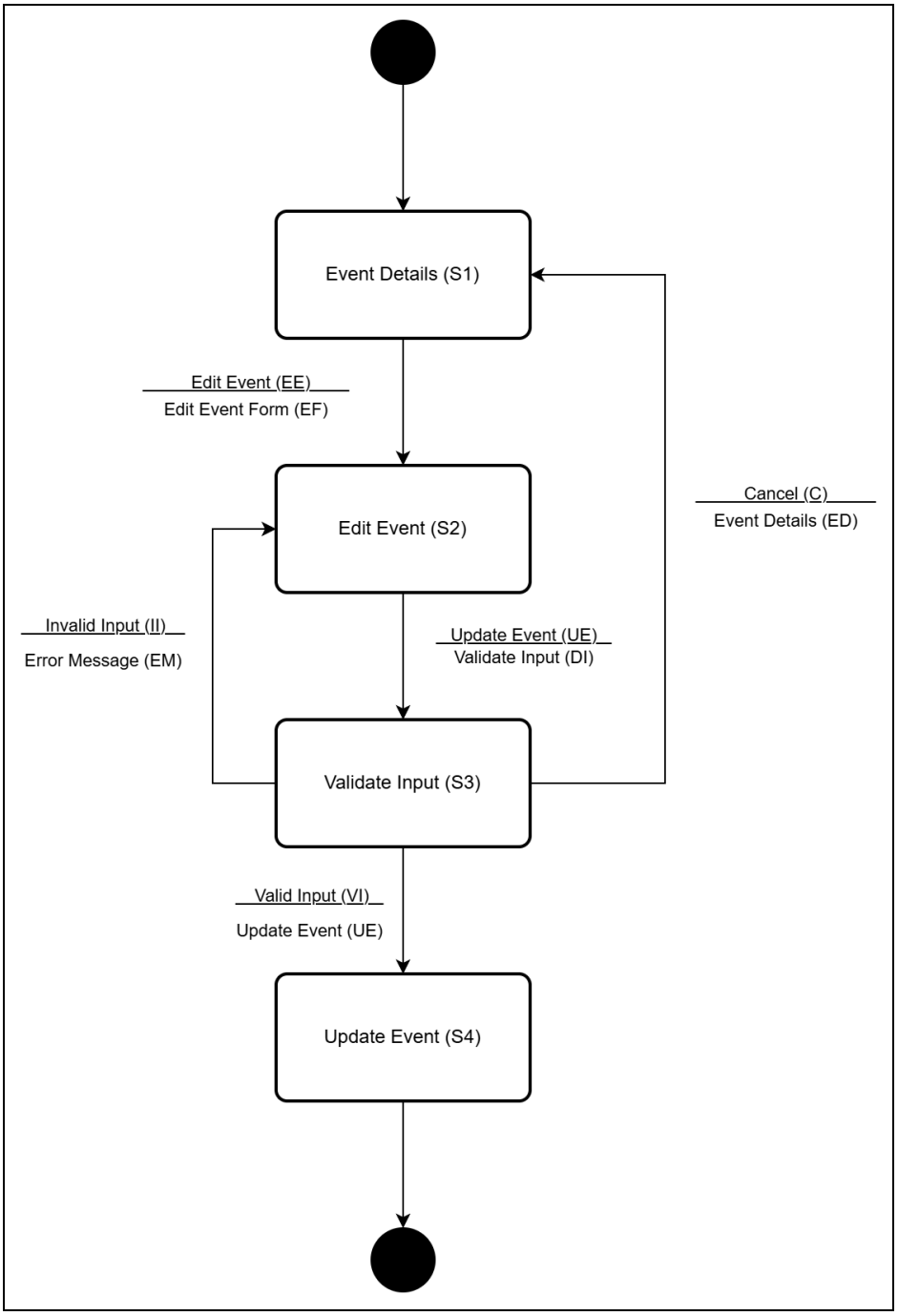


Figure 4.3 Edit Event State Transition Diagram

Input State	Edit Event (EE)	Update Event (UE)	Valid Input (VI)	Invalid Input (II)	Cancel (C)
Event Details (S1)	S2/EF TCOV-08-038	S1/-	S1/-	S1/-	S1/-
Edit Event (S2)	S2/-	S3/DI TCOV-08-039	S2/-	S2/-	S2/-
Validate Input (S3)	S3/-	S3/-	S4/UE TCOV-08-040	S2/EM TCOV-08-041	S1/ED TCOV-08-042

Table 4.8 Edit Event State Table

Test Condition ID	Test Condition	Test Coverage
TCON-08-038	S1 to S2 with input EE	TCOV-08-038
TCON-08-039	S2 to S3 with input UE	TCOV-08-039
TCON-08-040	S3 to S4 with input VI	TCOV-08-040
TCON-08-041	S3 to S4 with input II	TCOV-08-041
TCON-08-042	S3 to S4 with input C	TCOV-08-042

Table 4.9 Edit Event State State Coverage

iv. Use Case Testing

The table below shows the test case for sport organizer edit events in SportHub System.

Use Case	Edit Event	
Primary Actors	Sport Organizer	
Precondition	1. Users must be able to log in into the system as a sport organizer. 2. Users must have access to the event they created.	
Main Flow	1.	System displays a dashboard with a list of events that have been created.
	2.	Sport organizers click on a specific event.
	3.	System displays the chosen event details.
	4.	Sport organizers click on the edit event details button.
	5.	System displays the edit event details form.
	6.	Sport organizers edit the event details form.
	7.	Sport organizers click on the update button.
	8.	System validates the entered event details form.
	9.	If the event details entered are valid, the system displays a successful message.
Postcondition	Event details are updated in the event database.	
Alternative Flow	7.1	Sport organizers click on the cancel button.
Postcondition	Edit event cancelled and system navigate back to the specific event details page.	
Exceptional Flow	3.1	Sport organizers not the one created the event

- Unauthorized Sport Organizer		
Postcondition	System display error message and navigate back to specific event details page.	
Exceptional Flow - Invalid Input	8.2	If the entered event details are invalid, the system displays an error message at the invalid information.
Postcondition	System displays an error message at the invalid information and requires the sport organizer to refill the field.	

Table 5.0 Edit Event Use Case

Test Condition ID	**Test Condition**	**Test Coverage ID**	**Test Coverage**	**Test Data**
TCON-08-043	Main Flow	TCOV-08-043	Main Flow	Event Host : Hausboom Event Name : Hausboom Futsal Participant : 50 Fee : 100 Description : Fun Futsal
TCON-08-044	Alternate Flow	TCOV-08-044	Alternate Flow	Press “Cancel”
TCON-08-045	Exceptional Flow - Unauthorized Sport Organizer	TCOV-08-045	Exceptional Flow - Unauthorized Sport Organizer	Unauthorized Sport Organizer

TCON-08-046	Exceptional Flow - Invalid Input	TCOV-08-046	Exceptional Flow - Invalid Input	Invalid input

Table 5.1 Edit Event Use Case Test and Conditions

2.3.4. F009 - Login

Four (out of five) techniques are used for designing test for this feature:

- Equivalence partitioning is used to test valid, invalid and boundary input values for username and password fields.
- Boundary Value Analysis focuses on the edge cases like maximum and minimum allowed characters.
- Use case testing focuses on validating the functionality of the system by testing its behavior.
- Decision table testing used to identifies their input and their corresponding outputs

Equivalence Partitioning and Boundary Value Analysis

The figure below illustrates the progression from Equivalence Partitioning to Boundary Value Analysis within the SportHub System.

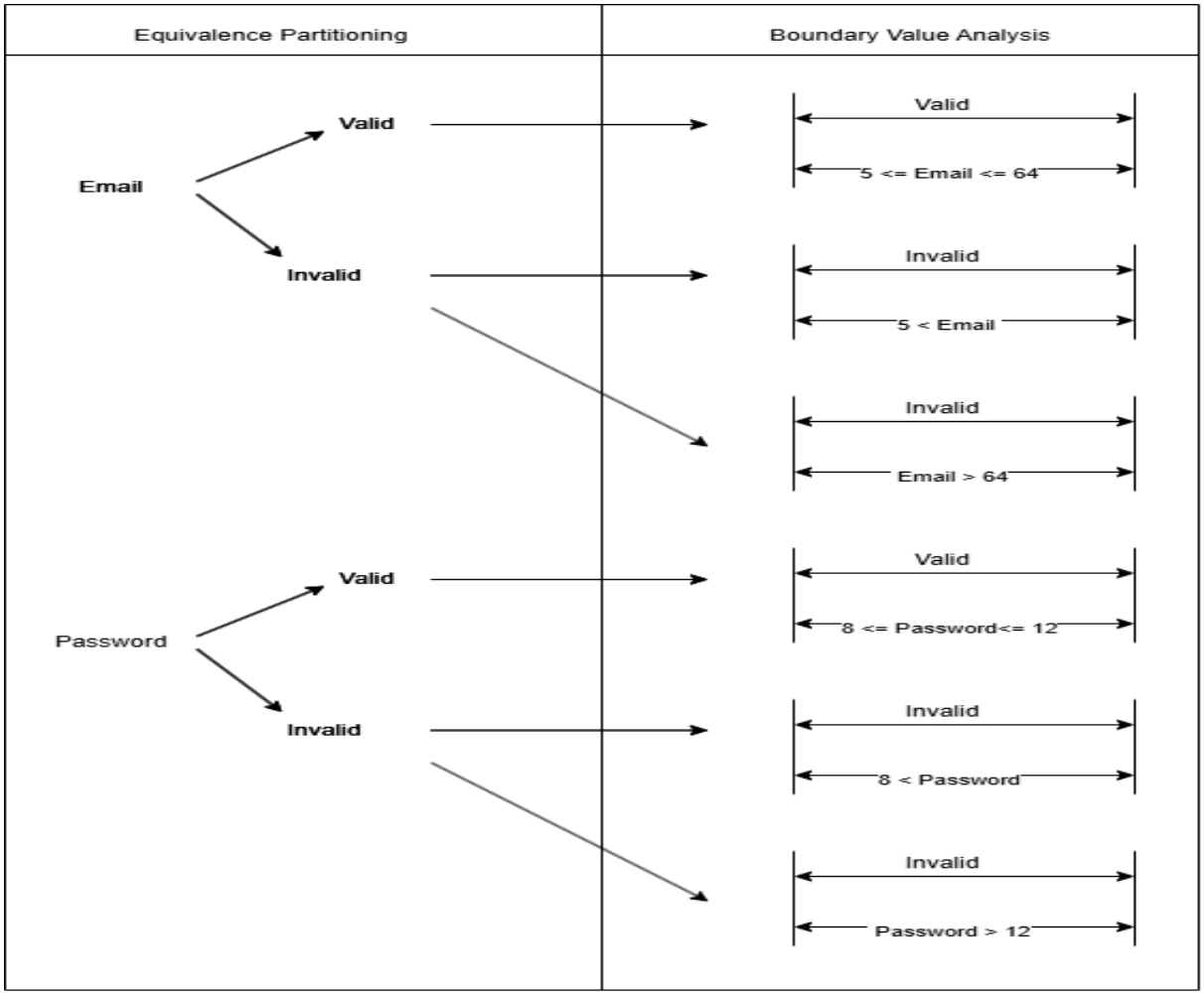


Figure 4.4 Phone Number and Name Equivalence Partition and Boundary Value Analysis

i. Equivalence Partitioning

The figure and tables below show the equivalence partition of email and password of its test condition coverage in SportHub System respectfully.

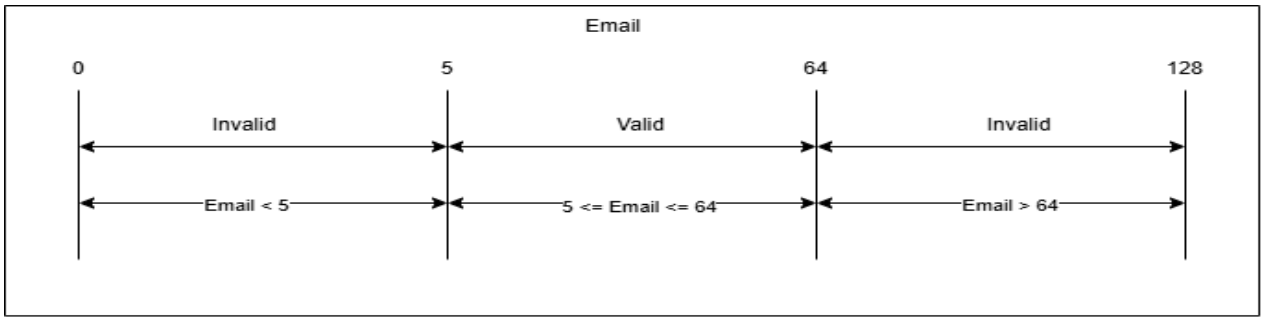


Figure 4.5 Email Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-09-001	5<= Email <=64	TCOV-09-001	5 <= Email <= 64 (Valid Input)	najwan@gmail.com
TCON-09-002	Valid domain	TCOV-09-002	Valid domain (Valid Input)	najwansem@gmail.com
TCON-09-003	Valid local-part	TCOV-09-003	Valid local-part (Valid Input)	ammarnajwan@yahoo.com
TCON-09-004	Email < 5	TCOV-09-004	0 <= Email <= 4 (Invalid Input)	naj@gmail.com
TCON-09-005	Email > 64	TCOV-09-005	Email > 64 (Invalid Input)	a123456789012345678901234567892654123698745632145632147856 98najwan@gmail.com
TCON-09-006	No domain	TCOV-09-006	No domain (Invalid Input)	najwan@
TCON-09-007	Invalid domain	TCOV-09-017	Invalid domain (Invalid Input)	samsul2233@gmail.invalid
TCON-09-008	No local-part	TCOV-09-008	No local-part (Invalid Input)	@gmail.com

TCON-09-009	Invalid local-part	TCOV-09-009	Invalid local-part (Invalid Input)	@invalidlocal.com
TCON-09-010	No @ symbol	TCOV-09-010	No @ symbol (Invalid Input)	Najwan.com

Table 5.2 Email Equivalence Partitions Test Conditions and Coverage

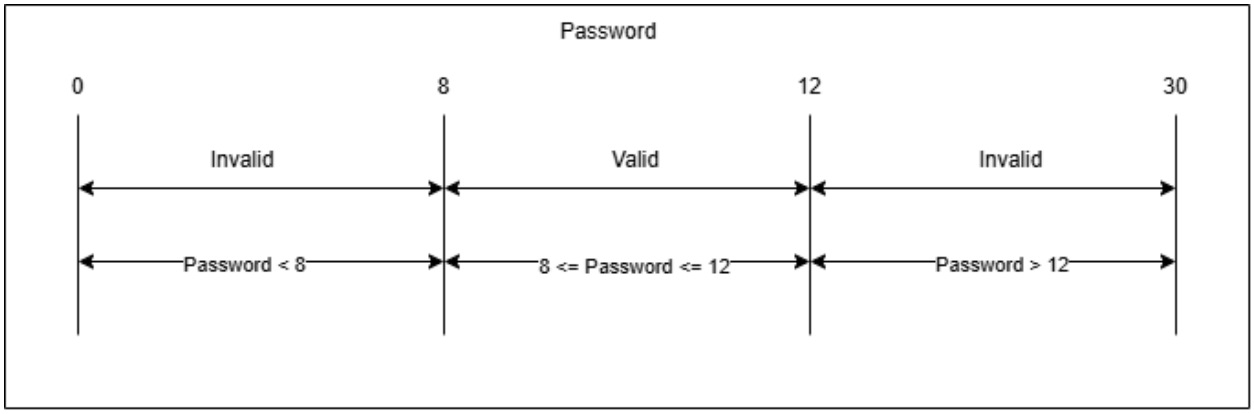


Figure 4.6 Password Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCOV-09-011	8 <= Password <=12	TCON-09-011	6 <= Password <=12 (Valid Input)	123456789sus
TCOV-09-012	Password < 8	TCON-09-012	0 <= Password <=5 (Invalid Input)	sus
TCOV-09-013	Password > 12	TCON-09-013	Password > 12 (Invalid Input)	SUS15SUS102SUS

Table 5.3 Password Equivalence Partitioning Test Condition and coverage

ii. Boundary Value Analysis

The figure and table show the boundary value analysis of email and password and list of condition coverage in Sporthub System.

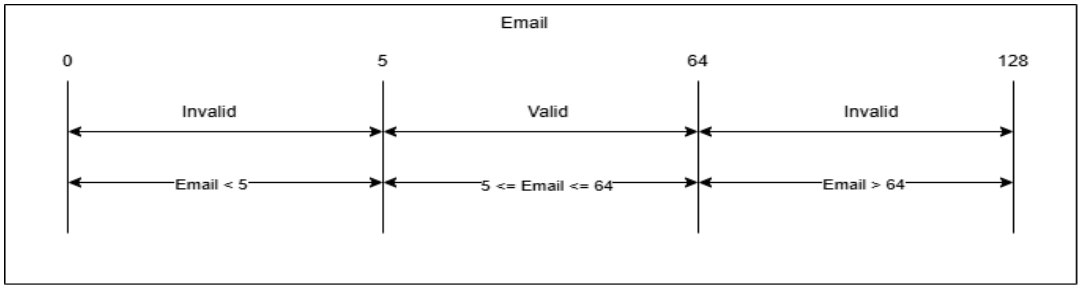


Figure 4.7 email boundary value analysis

EP1: Email < 5
EP2: 5<= Email <=64
EP3: Email >64

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCOV-09-014	email = 1	TCON-09-014	email = 1 (Invalid)	f@yahoo.com
TCOV-09-015	email= 0	TCON-09-015	email= 0 (Invalid)	-
TCOV-09-016	email = 4	TCON-09-016	email = 4 (Invalid)	kian@yahoo.com
TCOV-09-017	email = 15	TCON-09-017	email = 15 (Valid)	acanthocephalan @gmail.com
TCOV-09-018	email= 5	TCON-09-018	email = 5 (Valid)	abcde@yahoo.com
TCOV-09-019	email = 64	TCON-09-019	email = 64 (Valid)	b098765432112345678901234567 890123456789098765667854321 5678905678@example.com
TCOV-09-020	email = 66	TCON-09-020	email = 66 (Invalid)	v432156789012345678901234567 890123456789012345679012345 67aaa8901234@example.com
TCOV-09-021	email= 65	TCON-09-021	email = 65 (Invalid)	a123456789012345678901234567 890123456789012345670123456 77yy8901234@example.com
TCOV-09-022	email = 67	TCON-09-022	email = 67 (Invalid)	a123456789012345678901234567 890123456789012345678901234 5677yy8901234@example.com

Table 5.4 Email Boundary Value Analysis

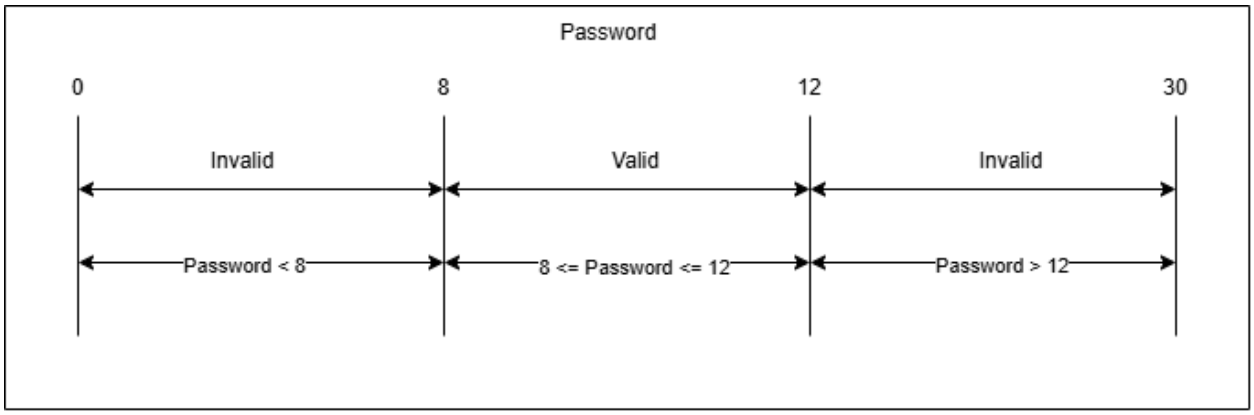


Figure 4.8 Password boundary value analysis

EP1: Password < 8
EP2: 8 <= password <= 12
EP3: password > 12

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCOV-09-023	Password = 0	TCON-09-023	Password = 0 (Invalid)	-
TCOV-09-024	Password = 4	TCON-09-024	Password = 4 (Invalid)	paso
TCOV-09-025	Password = 5	TCON-09-025	Password = 5 (Invalid)	Passo
TCOV-09-026	Password = 6	TCON-09-026	Password = 6 (Valid)	passow
TCOV-09-027	Password = 12	TCON-09-027	Password = 12 (Valid)	password1234
TCOV-09-028	Password = 13	TCON-09-028	Password = 13 (Invalid)	password12345
TCOV-09-029	Password = 14	TCON-09-029	Password = 14 (Invalid)	password1234567

Table 5.5 Password Boundary Value Analysis

iii. Use Case Testing

The table below shows the test case for Anonymous Sign Up in SportHub System.

<table>
<tr><td>Use Case</td><td colspan="2">User Log In</td></tr>
<tr><td>Goal in context</td><td colspan="2">The user may be successfully registered into the system if the entered registration credentials are valid.</td></tr>
<tr><td>Brief description</td><td colspan="2">The anonymous can log in into their respective account at the SportHub System.</td></tr>
<tr><td>Actor(s)</td><td colspan="2">Anonymous (Sport Enthusiast or Sport Organizer or Community Manager)</td></tr>
<tr><td>Pre condition</td><td colspan="2">Each actor has a registered account with specific-role based access permission.</td></tr>
<tr><td rowspan="4">Main Flow</td><td>Step</td><td>Action</td></tr>
<tr><td></td><td>System displays the "Log In" options for sport organizers, sport enthusiasts and community managers.</td></tr>
<tr><td></td><td>User selects an option to log in:

For the sport enthusiast and event organizer, it will navigate to the main log in page for anonymous that will display the form with the fields:

● Email
● Password

For the community manager, it will navigate to the main log in page for admin that will display the form with the fields:

● Email
● Password</td></tr>
<tr><td></td><td>User enters valid inputs for all the required fields in the form.</td></tr>
<tr><td></td><td></td><td>User clicks the "Log In" button to log in into the system.</td></tr>
</table>

		System validates the inputs.
		System processes the login credentials and identifies the user.
		System confirms the log in.
Alternate Flow - Missing Required Fields	2a.	User leaves one or more required fields (e.g., email or password) empty.
	2b.	User clicks "Log In".
	2c.	System highlights the empty fields and displays error messages
	2d.	Users are prompted to fill in the missing fields and re-submit.
Post condition :	The user will not log in. The user is directed back to the form to correct the errors.	
Alternate Flow - Invalid Email Format	2a.	User enters an invalid email in the email field
	2b.	User clicks "Log In".
	2c.	System displays an error message: "Invalid email format. Please enter a valid email address."
	2d.	Users are prompted to correct the email field and re-submit.
Post Condition	The user will not log in. The user is directed back to the form to correct the errors.	
Alternate Flow - Password Mismatch	2a.	User enters passwords that do not match
	2b.	User clicks "Log In".
	2c.	System displays an error message: "Passwords do not match."
	2d.	Users are prompted to correct the password fields and re-submit.
Post Condition :	The user will not log in. The user is directed back to the form to correct the errors.	

End	The user successfully logs into their account in the system.

Table 5.6 Login use case

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCOV-09-030	Main Flow	TCON-09-030	Main Flow	**For Sport Enthusiast:** Email : Ammar67@gmail.com Password : Ammar123 **For Sport Organizer:** Company Email :lsfresh@gmail.com Password :lsfresh123 **For Community Manager:** Email: Najwan11@gmail.com Password: Najwan123
TCOV-09-031	Alternate Flow -Missing Required Fields	TCON-09-031	Alternate Flow -Missing Required Fields	Email : Ammar@gmail.com Password : Ammar123
TCOV-09-032	Alternate Flow- Invalid Email Format	TCON-09-032	Alternate Flow- Invalid Email Format	ammar.com
TCOV-09-033	Alternate Flow - Incorrect	TCON-09-033	Alternate Flow - Password	Password : WrongPass!

	Password		Mismatch	

Table 5.7 Login Use Case Test and Condition

2.3.5. F011 - Edit Profile

Three (out of five) techniques are used for designing test for this feature:

- Equivalence Partitioning is used to split the input fields in the Edit Profile form into valid and invalid partitions for testing.
- Boundary Value Analysis will test the boundary values of the edit profile fields.
- Use case testing will test the edit profile function of Sporthub System.

Equivalence Partitioning and Boundary Value Analysis

The figure below shows the flow of Equivalence Partitioning towards Boundary Value Analysis in SportHub System respectfully.

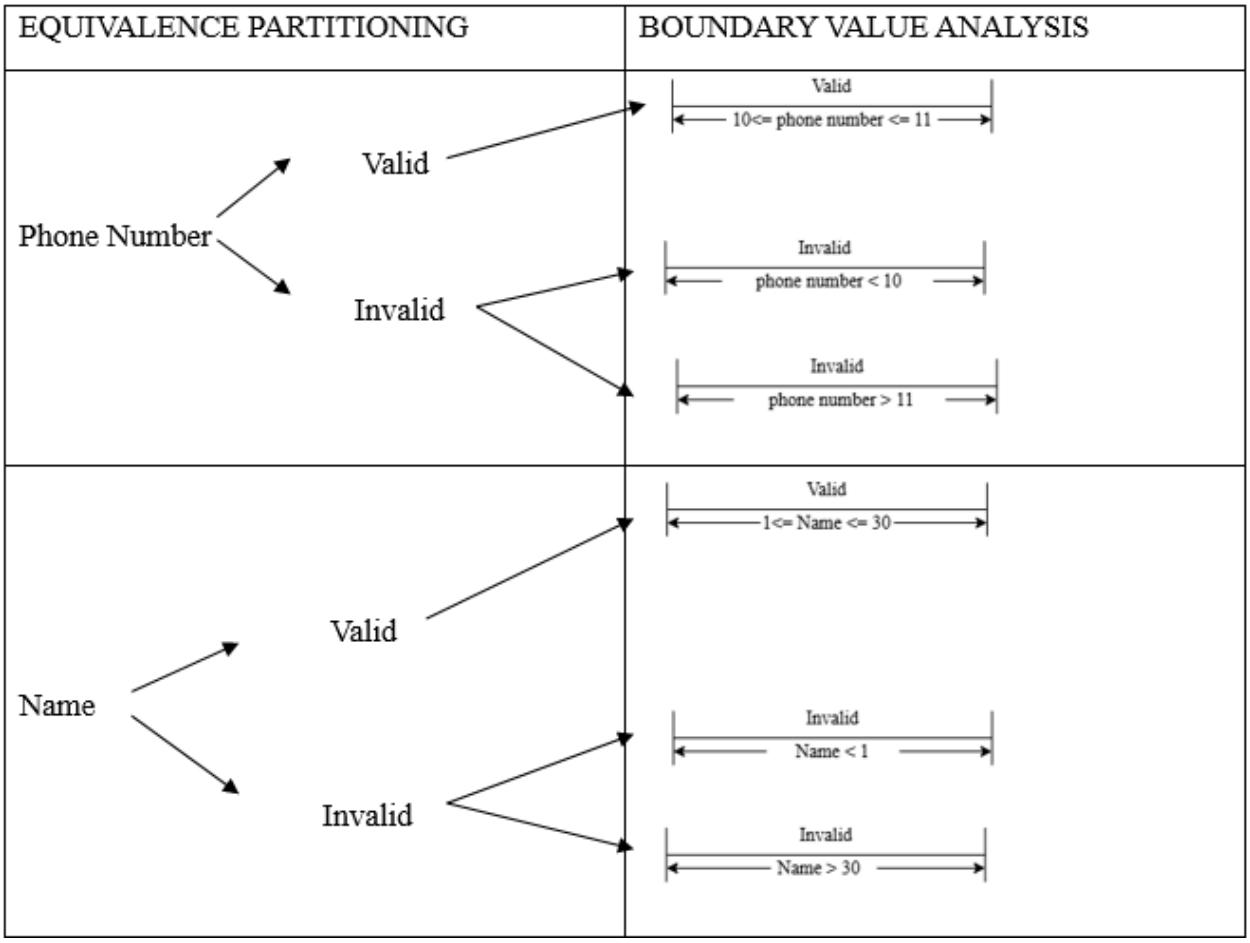


Figure 4.9 Phone Number and Name Equivalence Partition and Boundary Value Analysis

i. Equivalence Partitioning

The figure and tables below show the equivalence partition of name, phone number and email list of its test condition coverage in SportHub System respectfully.

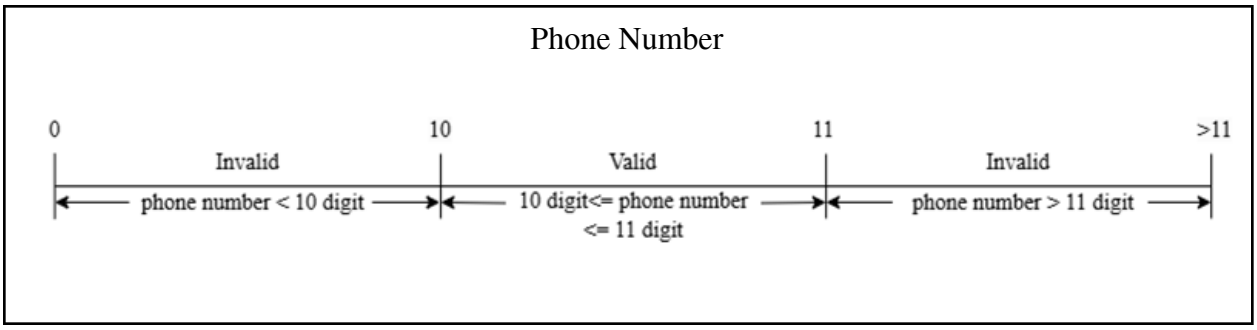


Figure 5.0 Phone Number Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-11-001	10 <= Phone number <= 11	TCOV-11-001	10 <= Phone number <= 11 (Valid input)	0183553241
TCON-11-002	Phone number < 10	TCOV-11-002	0 <= Phone number < 10 (Invalid input)	017917839
TCON-11-003	Phone number > 11	TCOV-11-003	Phone number > 11 (Invalid input)	013221239101

Table 2.2 Phone Number Equivalence Partitioning Test Condition and coverage

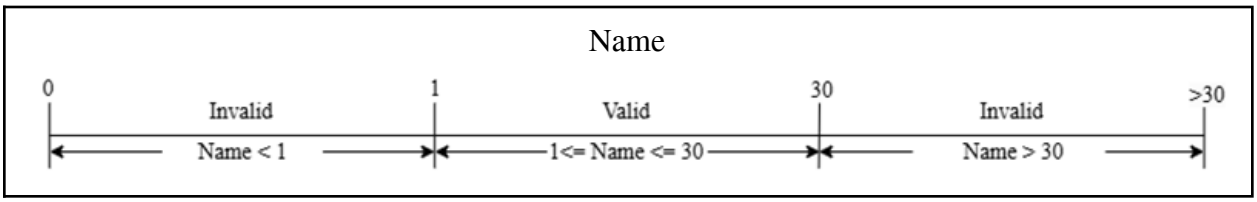


Figure 5.1 Name Equivalence Partitions

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-11-004	1 <= Name <= 30	TCOV-11-004	1 <= Name <= 30 (Valid input)	Farhana
TCON-11-005	Name < 1	TCOV-11-005	Name < 1 (Invalid input)	No input
TCON-11-006	Name > 30	TCOV-11-006	Name > 30 (Invalid input)	Nur Farhana Aqila Maisarah Amirah

Table 5.8 Name Equivalence Partitioning Test Condition and coverage

ii. Boundary Value Analysis

The figure and table show the boundary value analysis of phone number, name, list and list of condition coverage in Sporthub System.

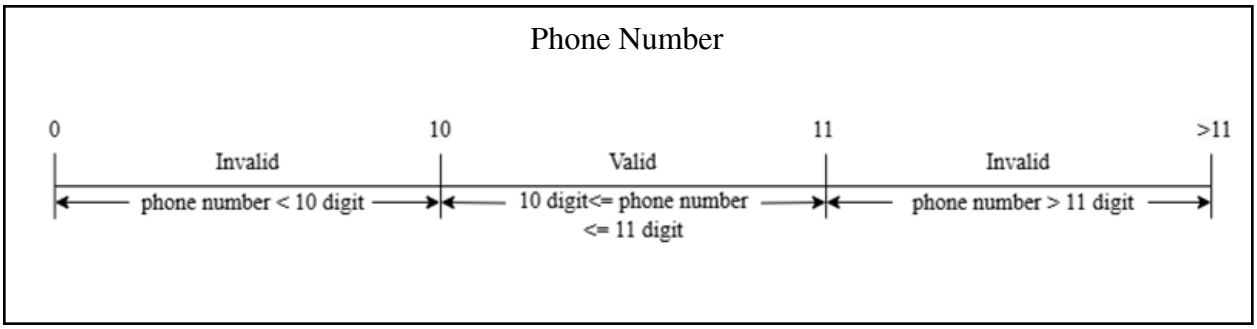


Figure 5.2 Phone number boundary value analysis

EP 1: Phone Number < 10
EP 2: 10 < Phone Number <= 11
EP 3: Phone Number > 11

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-11-007	Phone number = 9	TCOV-11-007	Phone number = 4 (Invalid)	0123
TCON-11-008	Phone number = 10	TCOV-11-008	Phone number = 10 (Valid)	0123456788
TCON-11-009	Phone number = 11	TCOV-11-009	Phone number = 11 (Valid)	01234567890
TCON-11-010	Phone number = 12	TCOV-11-010	Phone number = 12 (Invalid)	012345678901

Table 5.9 Phone number boundary value analysis

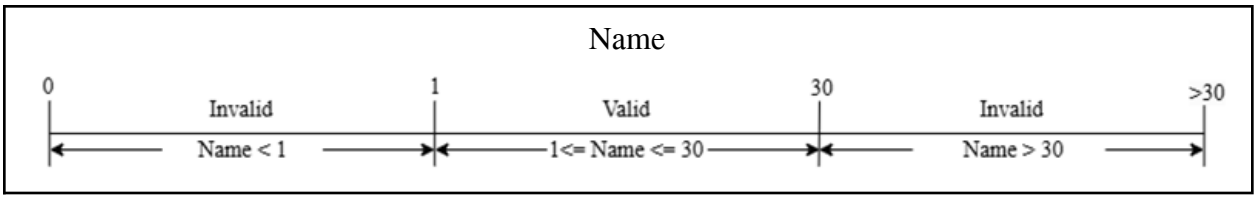


Figure 5.3 Name boundary value analysis

EP 1 : Name < 1
EP 2 : 1 <= Name <= 30
EP 3 : Name >30

Test Condition ID	Test Condition	Test Coverage ID	Test Coverage	Test Data
TCON-11-011	Name = 0	TCOV-11-011	Name = 0 (Invalid)	No input
TCON-11-012	Name = 1	TCOV-11-012	Name = 1 (Valid)	L
TCON-11-013	Name = 2	TCOV-11-013	Name = 2 (Valid)	Ng
TCON-11-014	Name = 29	TCOV-11-014	Name = 29 (Valid)	Sharifah Nurina Ariana Aqilah
TCON-11-015	Name = 30	TCOV-11-015	Name = 30 (Valid)	Sharifah Nurina Ariana Aqilahh
TCON-11-016	Name = 31	TCOV-11-016	Name = 31 (Invalid)	Sharifah Nurina Ariana Aqilahhh

Table 6.0 Name boundary value analysis

iii. Use Case Testing

The table below shows the test case for User Edit Profile in SportHub System.

Use Case	Edit Profile	
Purpose	To allow the users to update their personal information accurately.	
Actor	Community manager, sport enthusiast, sport organizer	
Precondition	The user must have an active account and be logged into the system.	
Scenario Name	Step	Action
Main Flow	1.	The user logs into the system and navigates to the "My Profile" section.
	2.	The system verifies the user's login credential such as email and determines the user's role. If the login email belongs to a Sport Enthusiast: The system displays the profile form with the following fields: - Image - Cover image - Name - Email - Phone number - Address - Gender - Date of birth - Preferred sports If the login email belongs to a Sport Organizer: The system displays the profile form with these fields: - Image - Cover image - Name - Email - Phone number - Business address - Preferred sports If the login email belongs to a Community Manager: The system displays the profile form with these fields: - Image - Cover image - Name - Email - Phone number - Gender - Date of birth

	3.	The user updates the required fields with new information.
	4.	The user clicks on the “Save Profile” button
	5.	The system validates the input and notifies the user that the profile update has been successfully saved.
Alternate Flow -Invalid name	2a.	The user enters invalid name.
	2b.	The user clicks “Save Profile”
Postcondition	The system marks the name field as invalid and prompts the message “Please enter a valid name”. The user is required to correct their input	
Alternate Flow -Invalid phone number	2a.	The user enters a phone number in the wrong format.
	2b.	The user clicks “Save Profile”.
Postcondition	The system marks the name field as invalid and prompts the message “Please enter a valid phone number”. The user must re-enter a valid phone number.	
Alternate flow -Empty field	2a.	The user leaves any field empty.
	2b.	The user clicks “Save Profile”
Postcondition	The system marks the empty fields and displays: “This field is required”. The user must complete the form.	

Table 6.1 Edit Profile use case

Test Condition ID	Test Condition	Test Condition ID	Test Coverage	Test Data
TCON-11-017	Main flow	TCOV-11-017	Main flow	Valid Information 1) Sport Enthusiast: Name= Rae Email= fareha1@gmail.com Phone number= 0192018392 Address= Melaka Gender= Female Date of birth= 8 Dec 2003 Preferred sports= swimming 2) Sport Organizer: Name= Volley Malaysia Email= Volley12@gmail.com Phone number= 0178910203 Business Address= Kuala Lumpur Preferred sports= Volleyball 3) Community Manager Name= Sporthub Email= Sporthub@example.com Phone number= 0123890129 Gender= Male Date of birth= 2 May 1999
TCON-11-018	Alternate Flow -Invalid name	TCOV-11-018	Alternate Flow -Invalid name	No input
TCON-11-019	Alternate Flow -Invalid phone number	TCOV-11-019	Alternate Flow -Invalid phone number	012345678

TCON-11-020	Alternate flow -Empty field	TCOV-11-020	Alternate flow -Empty field	Name= Volley Malaysia Email= Volley12@gmail.com Phone number= Business Address= Preferred sports= Volleyball

Table 6.2 Edit Profile Case Test and Conditions

2.4 TEST IDENTIFICATION

2.4.1 F001 - User Sign Up

Test Case ID	Description	Test Coverage ID	Test Condition ID
TC-01-001	Main Flow - Successful Sign up	TCOV-01-001	TCON-01-001
		TCOV-01-022	TCON-01-022
		TCOV-01-023	TCON-01-023
		TCOV-01-004	TCON-01-004
		TCOV-01-005	TCON-01-005
		TCOV-01-006	TCON-01-006
		TCOV-01-029	TCON-01-029
		TCOV-01-030	TCON-01-030
		TCOV-01-031	TCON-01-031
		TCOV-01-014	TCON-01-014
		TCOV-01-037	TCON-01-037
		TCOV-01-038	TCON-01-038
		TCOV-01-017	TCON-01-017
		TCOV-01-044	TCON-01-044
		TCOV-01-045	TCON-01-045
		TCOV-01-054	TCON-01-048
TC-01-002	Alternate Flow - Invalid Phone Number	TCOV-01-002	TCON-01-002
		TCOV-01-003	TCON-01-003
		TCOV-01-020	TCON-01-020
		TCOV-01-021	TCON-01-021

		TCOV-01-024	TCON-01-024
		TCOV-01-025	TCON-01-025
		TCOV-01-055	TCON-01-049
TC-01-003	Alternate Flow - Invalid Email Format	TCOV-01-007	TCON-01-007
		TCOV-01-008	TCON-01-008
		TCOV-01-009	TCON-01-009
		TCOV-01-010	TCON-01-010
		TCOV-01-011	TCON-01-011
		TCOV-01-012	TCON-01-012
		TCOV-01-013	TCON-01-013
		TCOV-01-026	TCON-01-026
		TCOV-01-027	TCON-01-027
		TCOV-01-028	TCON-01-028
		TCOV-01-032	TCON-01-032
		TCOV-01-033	TCON-01-033
		TCOV-01-034	TCON-01-034
		TCOV-01-056	TCON-01-050
TC-01-004	Alternate Flow - Invalid SSM Number	TCOV-01-035	TCON-01-035
		TCOV-01-036	TCON-01-036
		TCOV-01-039	TCON-01-039
		TCOV-01-040	TCON-01-040
		TCOV-01-058	TCON-01-052
TC-01-005	Alternate Flow- Invalid Password	TCOV-01-041	TCON-01-041
		TCOV-01-042	TCON-01-042
		TCOV-01-043	TCON-01-043

		TCOV-01-046	TCON-01-046
		TCOV-01-047	TCON-01-047
		TCOV-01-057	TCON-01-051

Table 6.3 Test Identification for Sign Up

2.4.2 F006 - Create Event

Test Case ID	Description	Test Coverage ID	Test Condition ID
TC-06-001	Complete Flow of Create Event	TCOV-06-001	TCON-06-001
		TCOV-06-002	TCON-06-002
		TCOV-06-003	TCON-06-003
		TCOV-06-004	TCON-06-004
		TCOV-06-005	TCON-06-005
		TCOV-06-033	TCON-06-018
TC-06-002	Alternatives Flow - Submit Empty Location	TCOV-06-006	TCON-06-006
TC-06-003	Alternatives Flow - Submit empty fields in Event Details form.	TCOV-06-007	TCOV-06-007
TC-06-004	Exceptional Flow - Invalid input	TCOV-06-008	TCON-06-018
		TCOV-06-009	TCON-06-018
		TCOV-06-010	TCON-06-018
		TCOV-06-011	TCON-06-018
		TCOV-06-012	TCON-06-018
		TCOV-06-013	TCON-06-018
		TCOV-06-014	TCON-06-018

Test Case ID	Description	Test Coverage ID	Test Condition ID
TC-06-001	Complete Flow of Create Event	TCOV-06-001	TCON-06-001
		TCOV-06-002	TCON-06-002
		TCOV-06-003	TCON-06-003
		TCOV-06-004	TCON-06-004
		TCOV-06-005	TCON-06-005
		TCOV-06-033	TCON-06-018
		TCOV-06-015	TCON-06-018
		TCOV-06-016	TCON-06-018
		TCOV-06-017	TCON-06-018
		TCOV-06-018	TCON-06-018

Table 6.4 Test Identification for Create Event

2.4.3 F008 - Edit Event

Test Case ID	**Description**	**Test Coverage ID**	**Test Condition ID**
TC-08-001	Main Flow - Successful Edit Event Details	TCOV-08-001	TCON-08-001
		TCOV-08-004	TCON-08-004
		TCOV-08-007	TCON-08-007
		TCOV-08-009	TCON-08-009
		TCOV-08-011	TCON-08-011
		TCOV-08-016	TCON-08-016
		TCOV-08-017	TCON-08-017
		TCOV-08-018	TCON-08-018

		TCOV-08-019	TCON-08-019
		TCOV-08-022	TCON-08-022
		TCOV-08-023	TCON-08-023
		TCOV-08-024	TCON-08-024
		TCOV-08-025	TCON-08-025
		TCOV-08-027	TCON-08-028
		TCOV-08-028	TCON-08-028
		TCOV-08-030	TCON-08-030
		TCOV-08-031	TCON-08-031
		TCOV-08-034	TCON-08-034
		TCOV-08-035	TCON-08-035
		TCOV-08-036	TCON-08-036
		TCOV-08-037	TCON-08-037
		TCOV-08-040	TCON-08-040
		TCOV-08-043	TCON-08-043
		TCOV-08-038	TCON-08-038
		TCOV-08-039	TCON-08-039
TC-08-002	Exceptional Flow - Invalid Input	TCOV-08-002	TCON-08-002
		TCOV-08-003	TCON-08-003
		TCOV-08-005	TCON-08-005
		TCOV-08-006	TCON-08-006
		TCOV-08-008	TCON-08-008
		TCOV-08-010	TCON-08-010
		TCOV-08-012	TCON-08-012
		TCOV-08-013	TCON-08-013

		TCOV-08-014	TCON-08-014
		TCOV-08-015	TCON-08-015
		TCOV-08-020	TCON-08-020
		TCOV-08-021	TCON-08-021
		TCOV-08-026	TCON-08-026
		TCOV-08-029	TCON-08-029
		TCOV-08-032	TCON-08-032
		TCOV-08-033	TCON-08-033
		TCOV-08-041	TCON-08-041
		TCOV-08-046	TCON-08-046
		TCOV-08-038	TCON-08-038
		TCOV-08-039	TCON-08-039
TC-08-003	Cancel Edit Event	TCOV-08-038	TCON-08-038
		TCOV-08-039	TCON-08-039
		TCOV-08-042	TCON-08-042
		TCOV-08-044	TCON-08-044
TC-08-004	Exceptional Flow - Unauthorized Sport Organizer	TCOV-08-038	TCON-08-038
		TCOV-08-045	TCON-08-045

Table 6.5 Test Identification for Edit Event

2.4.4 F009 - Login

Test Case ID	**Description**	**Test Coverage ID**	**Test Condition ID**
TCO-09-001	Main Flow - Successful login	TCOV-09-001	TCON-09-001
		TCOV-09-002	TCON-09-002

		TCOV-09-003	TCON-09-003
		TCOV-09-011	TCON-09-011
		TCOV-09-017	TCON-09-017
		TCOV-09-018	TCON-09-018
		TCOV-09-019	TCON-09-019
		TCOV-09-026	TCON-09-026
		TCOV-09-027	TCON-09-027
		TCOV-09-030	TCON-09-030
		TCOV-09-035	TCON-09-035
TCO-09-002	Exceptional Flow - Invalid Input	TCOV-09-004	TCON-09-004
		TCOV-09-005	TCON-09-005
		TCOV-09-006	TCON-09-006
		TCOV-09-017	TCON-09-007
		TCOV-09-008	TCON-09-008
		TCOV-09-009	TCON-09-009
		TCOV-09-010	TCON-09-010
		TCOV-09-012	TCON-09-012
		TCOV-09-013	TCON-09-013
		TCOV-09-014	TCON-09-014
		TCOV-09-015	TCON-09-015
		TCOV-09-016	TCON-09-016
		TCOV-09-020	TCON-09-020
		TCOV-09-021	TCON-09-021
		TCOV-09-022	TCON-09-022
		TCOV-09-023	TCON-09-023

		TCOV-09-024	TCON-09-024
		TCOV-09-025	TCON-09-025
		TCOV-09-028	TCON-09-028
		TCOV-09-029	TCON-09-029
		TCOV-09-031	TCON-09-031
		TCOV-09-032	TCON-09-032
		TCOV-09-033	TCON-09-033

Table 6.6 Test Identification for Login

2.4.5 F011 - Edit Profile

Test Case ID	**Description**	**Test Coverage ID**	**Test Condition ID**
TC-11-001	Main Flow - Successful Edit Profile Details	TCOV-11-001	TCON-11-001
		TCOV-11-004	TCON-11-004
		TCOV-11-008	TCON-11-008
		TCOV-11-009	TCON-11-009
		TCOV-11-012	TCON-11-012

		TCOV-11-013	TCON-11-013
		TCOV-11-014	TCON-11-014
		TCOV-11-015	TCON-11-015
TC-11-002	Exceptional Flow - Invalid Input	TCOV-11-002	TCON-11-002
		TCOV-11-003	TCON-11-003
		TCOV-11-006	TCON-11-006
		TCOV-11-007	TCON-11-007
		TCOV-11-010	TCON-11-010
		TCOV-11-016	TCON-11-016
		TCOV-11-018	TCON-11-018
		TCOV-11-019	TCON-11-019
TC-11-003	Exceptional Flow- No Input	TCOV-11-005	TCON-11-005

		TCOV-11-011	TCON-11-011
		TCOV-11-020	TCON-11-020

Table 6.7 Test Identification for Edit Profile

SECTION III

TEST CASE SPECIFICATION

3.1 PURPOSE

This test case specification supports the following objective:

i. To details the test cases derived from test coverage in section 2 Test Design Specification

3.2 ENVIRONMENT

SportHub System tests will be run using dummy accounts and did not perform with the real Sport enthusiast, Sport Organizer or Community Manager.The following are three dummy accounts, one is a Sport Enthusiast account the second is a Sport Organizer account and the third one is Community Manager account.

Actor	Email	Password
Sport Enthusiast	enthusiast2024@example.com	123
Sport Organizer	organizer2024@example.com	12345678
Community Manager	sporthub2024@example.com	12345678

Table 3.1 Test Account Information

3.3 TEST CASES

A set of input values, execution preconditions, expected results and execution postconditions, developed for a particular objective or test condition, such as to exercise a particular program path or to verify compliance with a specific requirement.

3.3.1 F001 - User Sign Up

Test Case ID	Input	Expected result
TC-01-001	Click “Sign Up” button	System display registration page
	Enter the sign up details form **For Sport Enthusiast:** Valid Phone Number : 011-70240408 Valid Email : Amir46@gamil.com Valid Password : Amir1234 **For Sport Organizer:** Valid Company SSM :12365479532 Valid Company Email :bagogo11@gmail.com Valid Phone Number:017-70240408 Valid Password:bagogo11	The system send details for verify account to community manager
	Click “Submit” Button	System store information into database
TC-01-002	Click “Submit” with phone number = 011-7024	System displays an error message for the invalid Phone Number format.
TC-01-003	Click “Submit” with email = amir46.co	System display an error message for the email format
TC-01-004	Click “Submit” with SSM Number =12365@##	System displays an error message for the invalid SSM Number format.
TC-01-005	Click “Submit” with password : 1234	System display an error message for the “The password field must be at least 8 characters”

Table 3.2 Test Case for Sign Up

3.3.2 F002 - Create Event

Test Case ID	Input	Expected Result
TC-06-001	Choose Sport Category	Navigate to Location page
	Enter Location	Navigate to Event Details Form
	Enter Event Details Sport Type = “Football” Location = “Semenyih” Event Host = “Adidas” Event Name = “Boom+ Sepak Bola” Date = 9 October 2026 Time = 8:15pm - 10:15pm Number of Participant = 200 Fee = 200 Description = “Best Pesepak” Photo = hausboom.jpg	Create event successful
TC-06-002	Click submit with location = “”	Location page refresh and not navigate to the next page
TC-06-003	Click submit with any of the field empty Sport Type = “” Location = “Semenyih” Event Host = “Adidas” Event Name = “” Date = 9 October 2026 Time = 8:15pm - 10:15pm Number of Participant = 200 Fee = 200 Description = “Best Pesepak” Photo = hausboom.jpg	Error display
TC-06-004	Submit the form with the field Host Name left empty.	Error message display and event is not created

Table 3.3 Test Case for Create Event

3.3.3 F003 - Edit Event

Test Case ID	Input	Expected Result
TC-08-001	Choose specific event	System display event details page.
	Click ‘Edit Event Details’	System display edit event details form.
	Event Host : Challo Event Name : Challo Fun Run Number of Participant : 50 Fee : 60 Description : 5KM Fun Run	System displays a successful message “Event Successfully Update”.
TC-08-002	Choose specific event	System display event details page.
	Click ‘Edit Event Details’	System display edit event details form.
	Invalid input for field : 1. Event Host 2. Event Name 3. Date 4. Time 5. Number of Participants 6. Fee 7. Description 8. Photo	System displays an error message “The Description Field is Required”.
TC-08-003	Choose specific event	System display event details page.
	Click ‘Edit Event Details’	System display edit event details form.
	Click ‘Cancel’	System navigate back to the event details page.
TC-08-004	Choose specific event	System display event details page.
	Click ‘Edit Event Details’	System display an error

		message “You are not authorized to edit this event”

Table 3.4 Test Case for Edit Event

3.3.4 F004 - Login

Test Case ID	Input	Expected result
TC-09-001	Click “Login” button	System display the main menu of the system
TC-09-002	**For Sport Enthusiast:** 1. Valid Email : Ammar@gmail.com 2. Valid Password : Ammar123 **For Sport Organizer:** 1.Valid Company Email :lsfresh@gmail.com 2.Valid Password: lsfresh123 **For Community Manager:** 1.Valid Admin Email :admin@gmail.com 2.Valid Password: admin123	The system display the main menu page upon the successful log in
	For Sport Enthusiast: 1.Valid Email : Ammar@gmail.com 2.Valid Password : Ammar123 **For Sport Organizer:**: 1.Valid Company Email :lsfresh@gmail.com 2.Valid Password:lsfresh123 **For Community Manager:** 1.Valid Admin Email :admin@gmail.com 2.Valid Password: admin123	System display an error message for the missing required field
	For Sport Enthusiast: 1.Invalid Email : Ammar@my.com	System display an error message for the email format

	2.Valid Password : Ammar123 **For Sport Organizer:** 1.Invalid Company Email :lsfresh@.my 2.Valid Password:lsfresh123 **For Community Manager:** 1.Invalid Admin Email :admin@.my 2.Valid Password: admin123	
	For Sport Enthusiast: 1.Valid Email : Ammar@gmail.com 2.Invalid Password : Ammar99 **For Sport Organizer:** 1.Valid Company Email :lsfresh@gmail.com 2.Invalid Password:lsfresh99 **For Community Manager:** 1.Valid Admin Email :admin@gmail.com 2.Invalid Password: admin99	System display an error message for the incorrect password
TC-09-003	**Click "Login" Button**	System navigate user to the main menu page

Table 3.5 Test Case for Login

3.3.5 F005 - Edit Profile

Test Case ID	Input	Expected result
TC-11-001	Click on "My Profile" button	The system will display user profile form page.
	Enter the field that need to be updated **Sport Enthusiast:** Name: Ng Email: LeeNg1@gmail.com Phone Number: 0123456789 Address: Kuala Lumpur Gender: Male Date of birth: 03 Dec 2001 Preferred sport: Badminton **Sport Organizer:** Name: Kelab Bola Dunia Email: bolaMal12@gmail.com Phone Number: 0123452345 Business Address: Selangor Preferred sport: Football **Community Manager:** Name: Sporthub Email: Sporthub@gmail.com Phone Number: 0123456221 Gender: Male Date of Birth: 2 April 1999	System notifies the user and display "Profile Updated Successfully"
TC-11-002	Clck on "My Profile" button	The system display user profile form page.
	Enter invalid information: **Sport Enthusiast:** Invalid Name: F Invalid Phone Number: 01890182 **Sport Organizer:** Valid Name: Paralympic Commitee Invalid Phone Number: 01192038 **Community Manager:** Valid Name: Sporthub1 Invalid Phone Number: 0123456221	The system display error message.
TC-11-003	Click on "My Profile" button	The system display user profile form page
	Enter empty information: **Sport Enthusiast:** Invalid Name: Invalid Phone Number: 0133018212 **Sport Organizer:** Valid Name: SUKANKITA Invalid Phone Number: **Community Manager:** Valid Name: Sporthub11 IInvalid Phone Number:	System display "The name field is required" and "The phone field is required".

Table 3.6 Test Case for Edit Profile

SECTION IV

TEST PROCEDURE SPECIFICATION

4.1 PURPOSE

This procedure describes the steps necessary to perform the test specified in the test design specification for SportHub System. The procedure describes the execution of the test case described in Section 3.0 Test Case Specification.

4.2 TEST PROCEDURE

A test procedure is a formal specification of test cases to be applied to one or more target program modules. Test procedures are executable. A process called the VERIFIER applies a test procedure to its target modules and procedures an exception report indicating which test cases,if any, failed

Before the execution of the test procedures, these requirements must be meet

1. Dummy accounts are created, and testers are know of the credentials
2. SportHub System web application must be accessed with a browser.

4.2.1 Sign Up

Test Procedures ID	Objective	Test cases to be executed	Set-up	Wrap-up
TP-01-001	Anonymous Sign Up	TC-01-001, TC-01-002, TC-01-003, TC-01-004, TC-01-005	1. Click “Sign Up” button 2. Choose category (Sport Enthusiast or Sport Category) 3. Enter details 4. Click “Submit” button	None

Table 4.1 Test Procedures for Sign Up

4.2.2 Create Event

Test Procedures ID	Objective	Test cases to be executed	Set-up	Wrap-up
TP-06-001	Sport Organizer create event	TC-06-001, TC-06-002, TC-06-003, TC-06-004	1. Choose the sport category. 2. Enter the event location. 3. Enter all the event details in Event Details form. 4. Click 'Create Event'	None

Table 4.2 Test Procedures for Create Event

4.2.3 Edit Event

Test Procedure ID	**Objective**	**Test Case to be Executed**	**Set Up**	**Wrap Up**
TP-08-001	Edit Event Details	TC-08-001, TC-08-002, TC-08-003, TC-08-004,	1. Choose a specific event. 2. Click "Edit Event Details". 3. Modify event details fields. 4. Click "Update".	None

Table 4.3 Test Procedures for Edit Event

4.2.4 Login

Test Procedures ID	Objective	Test cases to be executed	Set-up	Wrap-up

TP-09-001	Anonymous Login	TC-09-001, TC-09-002, TC-09-003	1. Click the “Sign In” button. 2. Enter the details needed. 3. Click the “Login” button.	None

Table 4.4 Test Procedures for Login

4.2.5 Edit Profile

Test Procedure ID	Objective	Test Cases to be Executed	Set Up	Wrap Up
TP-11-001	Edit Profile	TC-11-001, TC-11-002, TC-11-003	1. Click “My Profile” 2. Edit profile details. 3. Click on “Save Profile” button	None

Table 4.5 Test Procedures for Edit Profile

SECTION V

TEST LOG

5.1 PURPOSE

The purpose of the test log is to document and provide detailed information about the success or failure of a test executed in this project. By capturing relevant data and observations during the test, it ensures that all outcomes are systematically recorded. This log serves as a foundation for subsequent analysis of the raw data, enabling a clear and accurate determination of the test effort's overall results and effectiveness.

5.2 TEST LOG

Test Case ID	Test Procedure ID	Tool	Pass/Fail	Test Incident ID	Remark
TC-01-001	TP-01-001	Manual	Pass	-	-
TC-01-002			Pass	-	-
TC-01-003			Pass	-	-
TC-01-004			Pass	-	-
TC-01-005			Pass	-	-
TC-06-001	TP-06-001	Manual	Pass	-	-
TC-06-002			Pass	-	-
TC-06-003			Pass	-	-
TC-06-004			Pass	-	-
TC-08-001	TP-08-001	Manual	Pass	-	-
TC-08-002			Pass	-	-
TC-08-003			Pass	-	-
TC-08-004			Pass	-	-

TC-09-001	TP-09-001	Manual	Pass	-	-
TC-09-002			Pass	-	-
TC-09-003			Pass	-	-
TC-11-001	TP-11-001	Manual	Pass	-	-
TC-11-002			Pass	-	-
TC-11-003			Pass	-	-

Table 5.0 Test Log

SECTION VI

SUMMARY

The following table summarize the total activities performed as part of the testing process:

Test Cases Planned	Test Cases Executed	Test Cases Pass	Test Cases Failed
19	19	0	0

The testing process covered the following functionalities in the SportHub system:

- User Sign-Up
- Create Event
- Edit Event
- Login
- Edit Profile

A total of 19 test cases have been executed with no incident or defects recorded. Thus, the project does not need to be re-tested because no defects have been found, thus the quality of the project has been ensured. The product has been confirmed to meet the requirements outlined in the Software Requirements Specification (SRS) and Software Design Specification (SDS) documents, both in version 1.0, as issued by the developers.